

## CURRICULUM VITA

Kevin Dean Ashley

### University Addresses:

School of Law  
University of Pittsburgh  
3900 Forbes Avenue  
Pittsburgh, Pennsylvania 15260  
(412) 648-1495

Learning Research and Development Center  
University of Pittsburgh  
3939 O'Hara Street  
Pittsburgh, Pennsylvania 15260  
(412) 624-7496

### Research Interests:

My research interests in learning, law, and computer science are to:

- (1) Develop computational models of case-based reasoning (CBR) and argumentation in domains like law and practical ethics to better understand decision-making and as a basis for intelligent systems to educate students;
- (2) Develop techniques for linking computational models of legal reasoning with legal texts in order to facilitate acquiring knowledge in Artificial Intelligence (AI) programs and to assist legal practitioners;
- (3) Identify and analyze special legal problems posed by computer technology in such areas as intellectual property, commercial law, product liability, technology licensing, and privacy.

### Summary of Qualifications:

Professor of Law and Intelligent Systems, University of Pittsburgh  
Senior Scientist, Learning Research and Development Center  
Adjunct Professor of Computer Science  
Fellow, American Association of Artificial Intelligence  
National Science Foundation Presidential Young Investigator  
M.A., Ph.D., Computer Science, University of Massachusetts  
J.D., Harvard Law School  
B.A., Philosophy, Princeton University  
Associate Attorney, White & Case, 14 Wall Street, New York City  
Visiting Scientist, IBM Thomas J. Watson Research Center

### Professional Academic and Research Experience:

UNIVERSITY OF PITTSBURGH, Pittsburgh, Pennsylvania.

Dates: September, 1989 through present.

#### Current Joint Appointments:

Professor of Law (with tenure), School of Law, September, 1998  
Professor of Intelligent Systems, Graduate Program in Intelligent Systems, September, 1998  
Senior Scientist, Learning Research and Development Center, October, 1998  
Adjunct Professor of Computer Science, September, 1998.

#### Previous Joint Appointments:

Co-Director, University of Pittsburgh Graduate Program in Intelligent Systems, 1994-1995  
Associate Professor of Law (with tenure), School of Law, September, 1993  
Associate Professor of Intelligent Systems, Graduate Program in Intelligent Systems, September, 1993  
Adjunct Associate Professor of Computer Science, September, 1993  
Assistant Professor of Law, School of Law, September, 1989  
Assistant Professor of Intelligent Systems, Graduate Program in Intelligent Systems, September, 1993  
Research Scientist, Learning Research and Development Center, September, 1989  
Adjunct Assistant Professor of Computer Science, September, 1989

THOMAS J. WATSON RESEARCH CENTER, IBM Corp., Yorktown Heights, New York.

Dates: June, 1988 through July, 1989.

Title: Visiting Scientist, Mathematical Sciences and Computer Science Departments.

Developed research proposals for applying AI techniques to assist attorneys in legal practice.

**Honors and Awards:**

University of Massachusetts Amherst College of Information and Computer Sciences Outstanding Achievement and Advocacy Award (OAA) in the category of Outstanding Achievement in Education. "For seminal work in computationally modeling argumentation, legal and ethical reasoning, and in designing instructional systems in case-based domains". May 1, 2015

Visiting Professor, School of Law of the University of Bologna, December, 2012 - 2017.

Senior Visiting Fellow, Institute for Advanced Studies, University of Bologna, October-November, 2011.  
Visiting Fellow, Law Department, European University Institute, Firenze. October, 2011.

Buchanan, Ingersoll & Rooney Faculty Scholar, 2011-2012.

University of Pittsburgh Advisory Council on Instructional Excellence Innovation in Education Award for project entitled, "A Peer-Review-Based Student Model for Ill-Defined Problem-Solving" \$25,000. April, 2009.

Selected as a Fellow of the American Association of Artificial Intelligence. 2002. "For significant contributions in computationally modeling case-based and analogical reasoning in law and practical ethics."

Chancellor's Distinguished Research Award. January, 2000. "You won special praise for developing a revolutionary artificial intelligence (AI) model of case-based reasoning in law. This award honors your development of a cognitive science model of practical ethical reasoning and an AI model of ethics case comparison as well as your pioneering work in applying AI to research in legal and practical ethical reasoning."

Outstanding Research Paper Award. Third International Conference On Case-Based Reasoning. Seon, Germany. July, 1999

Distinguished Paper Award. First International Conference on Case-Based Reasoning, Sesimbra, Portugal, October, 1995.

National Science Foundation Presidential Young Investigator Award (PYI), 1990. Award combines direct and matching funds up to \$100,000 per year for a period of five years to study case-based and analogical reasoning in law and legal education.

Philips Laboratories Award for Best Student Paper at Fourth Conference on Artificial Intelligence Applications of the Institute of Electrical and Electronics Engineers, Inc. (IEEE), San Diego, 1988.

IBM Graduate Research Fellowship, 1985--1987.

**Grants:**

Intelligent Scaffolding of Peer Review of Writing. Institute of Education Sciences, R305A120370. Co-PI with D. Litman and C. Schunn, 7/1/12-6/30/15, \$1,498,941.

National Science Foundation Award No. 1122504, "DIP: Teaching Writing and Argumentation with AI-Supported Diagramming and Peer Review," (\$1,349,985.00) 2011-2015. PI with Chris Schunn and Diane Litman, co-PIs.

Deutscher Akademischer Austauschdienst. Award for a Research visit to the Federal Republic of Germany. April-May, 2012.

Learning Research and Development Center Internal Grant entitled “Keeping Instructors Well-Informed in Computer-Supported Peer Review” (\$140,000) 2011-2012. With Diane Litman, Chris Schunn, and Jingtao Wang.

National Science Foundation EAGR Grant entitled “Modeling Interpretive Argument with Case Analogies and Rules in Ill-defined Domains” (\$50,000) 2010-2012.

URC Multidisciplinary Small Grant Program grant entitled “Automating Comparative Analysis of Public Health Statutory Frameworks” (\$50,000 per year, renewable for 3 years) 2010-2014.

Learning Research and Development Center Internal Grant entitled “Improving Learning from Peer Review with NLP and ITS techniques” (\$150,000) 2009-2010. With Chris Schunn and Diane Litman.

Learning Research and Development Center Internal Grant entitled “Measuring Classroom Discussions in Mathematics and Literacy” (\$150,000) 2008-2010. With Mary Kay Stein, Margaret McKeown, Margaret Smith, Richard Correnti.

National Science Foundation Grant entitled “Hypothesis Formation and Testing in an Interpretive Domain: a Model and Intelligent Tutoring System” (\$650,000) 2004-2009.

National Science Foundation Grant entitled “Collaborative Case-Based Learning in Engineering Ethics” (\$420,000) 2002-2005.

National Science Foundation Grant entitled “Adding Domain Knowledge to Inductive Learning Methods for Classifying Texts” (\$162,825) 1997-2000; (\$200,002) 2000-2003.

National Science Foundation Grant entitled “Modeling Learning to Reason with Cases in Engineering Ethics: A Test Domain for Intelligent Assistance” (\$524,919) 1997-2001.

National Science Foundation Ethics and Values Program Grant entitled “Practical Ethical Instruction with Expert-Analyzed Cases” (\$23,880) 1997-2000.

National Science Foundation Learning and Intelligent Systems Program Grant entitled “Center for Interdisciplinary Research on Constructive Learning Environments” (\$4,997,797) 1997-2002.

University of Pittsburgh ECAC Instructional Technology Working Group Equipment Grant (\$21,936) 1997.

National Science Foundation Presidential Young Investigator Award. I secured full matching funds (\$100,000) for all five years of the PYI award, 1991-1996.

Awarded Advanced Instructional Technology Project Grant (\$13,000) by the Instructional Technology Working Group of the University of Pittsburgh Executive Committee on Academic Computing for “Field Test and Deployment of a Case Argument Tutorial Program (CATO).” 1994-1995.

West Publishing Company. \$20,000 per year for 1993-1996.

Digital Equipment Corporation External Research Program Equipment Grants. \$10,095 for 1992-1993. \$45,750 for 1991-1992.

National Center for Automated Information Retrieval (NCAIR) grants of \$15,000 per year for 1990 - 1996 to support a project entitled “A Socratic Tutorial Program for Law Students”.

Andrew W. Mellon Foundation. I was one of the principal investigators on a grant entitled “Varieties of Reasoning in the Social and Natural Sciences” for a project entitled “Case Comparison in Practical Ethics”.

**Graduate and Post-Graduate Education in Computer Science:**

UNIVERSITY OF MASSACHUSETTS, Computer and Information Science Department,  
Amherst, Massachusetts.

Dates: February, 1982 through May, 1988.

Degrees: Ph.D., February, 1988.

M.A., September, 1985.

G.P.A.: 4.0/4.0

Dissertation: “Modeling Legal Argument: Reasoning with Cases and Hypotheticals”, describing my design and development of *Hypo*, a program that performs case-based reasoning and models legal reasoning in the domain of trade secrets law. *Hypo* employs a Case Knowledge Base of actual legal cases to make and evaluate legal arguments about fact situations input by an attorney. The program poses hypothetical modifications of the fact situation to suggest how the arguments could be strengthened or weakened.

Post-Doctoral Researcher: From October, 1987 through May, 1988 with Professor Edwina Rissland, funded by the University Research Initiative (“URI”), award no. N00014-86-K-0764. Applied *Hypo* to a statutory legal domain in the TaxHypo program.

Research Assistantships: From 1986 through 1987 with Professor Edwina Rissland on Case-Based Reasoning, funded by the Department of Defense Advanced Research Projects Agency (“DARPA”), contract no. N00014-84-K-0017, and URI. From 1984 through 1986 with Professors Wendy Lehnert, David McDonald, and Edwina Rissland on the Counselor project, funded by DARPA, to design a case-based reasoning system with sophisticated natural language understanding and generation. From 1982 through 1984 with Professor Edwina Rissland on Constrained Example Generation, funded by the National Science Foundation (“NSF”), grant no. IST-8212238, to examine dynamic generation and modification of legal hypotheticals.

Coursework: Fundamentals of Systems Programming, Fundamentals of Computation, Introduction to Operating Systems, Information Systems, Fundamentals of Cybernetics, Artificial Intelligence, AI Programming Techniques, Computational Epistemology, Knowledge Representation & Expert Systems, AI Models of Uncertainty, Case-Based Reasoning, Machine Learning.

Programming Experience: Common Lisp, Pascal.

**Law School Teaching Experience:**

UNIVERSITY OF PITTSBURGH, Pittsburgh, Pennsylvania.

Courses: Artificial Intelligence and Law Seminar, Artificial Intelligence and Law Practicum, Intellectual Property, Cyberspace and Law, Computers and Law, Information Age Torts Seminar, Commercial Paper.

Developed practicum entitled “Artificial Intelligence and Law” to give law students and graduate students an opportunity to gain practical experience in developing and evaluating computational models for legal information retrieval and legal reasoning.

Developed seminar entitled “Artificial Intelligence and Law” to introduce law students to the analytical problems of reasoning with legal rules and precedents as evidenced in AI research models of legal reasoning. Course materials include extracts from readable research papers and books.

Developed course and seminar entitled “Cyberspace and the Law” to investigate legal issues caused by the development and ubiquity of the World Wide Web. Issues involve First Amendment freedoms, intellectual property, privacy, commercial licensing, crime and jurisdiction.

Developed seminar entitled “Information Age Torts” to investigate legal response to risks of physical and economic injury, invasion of privacy, and injury to reputation caused by computer and database

technology. It examines negligence, product liability, defamation, and privacy-related legal standards applicable to software producers, computerized information publishers, and computerized bulletin board operators.

Developed course entitled "Computers and Law" to introduce law students to special legal problems posed by computer technology in the areas of intellectual property, contracting, tort liability, technology licensing, computer crime and privacy. The course focuses on the systemic problems of adapting the substantive law to this volatile area of technological and economic change. It addresses some special challenges posed by advances in artificial intelligence (e.g., contract and tort liability associated with expert systems and protecting intellectual property interests in "intelligent" software.)

BOSTON UNIVERSITY LAW SCHOOL, 765 Commonwealth Ave., Boston, Massachusetts.

Lecturer on Law, Fall Semester, 1987.

Course: Computers and Law. (See description above.)

**Computer Science Teaching Experience:**

UNIVERSITY OF MASSACHUSETTS, Computer and Information Science Department,  
Amherst, Massachusetts.

Teaching Assistant for COINS 583, Artificial Intelligence, taught by Edwina Rissland, and for COINS 123, Introduction to Problem Solving with the Computer. Occasional Lectures.

Other teaching experience: I have presented comprehensive four-hour tutorials entitled "Case-Based Reasoning" at AAAI, IJCAI, ICAIL and IEEE meetings. See Tutorials section below.

**Legal Experience:**

WHITE & CASE, 1155 Ave. Americas, New York, New York 10036.

Associate: October 4, 1976 through June 12, 1981.

Principally concerned with commercial litigation, my case assignments included matters involving contract disputes, products liability, suits under the securities laws, creditors' rights, illegal payments, antitrust and trademark law. My involvement in these matters included participating at trial, taking and defending depositions, preparing witnesses, arguing motions, negotiating settlements, drafting pleadings, writing briefs, supervising discovery and preparing appeals. To gain additional practical experience, I participated in legal aid programs conducted by White & Case in conjunction with The Legal Aid Society and the City of New York Law Department. As part of one such program, I personally conducted the defense in a four day jury trial of a medical malpractice case and the prosecution of a post-trial motion and appeal in that case.

**Legal Education:**

HARVARD LAW SCHOOL, Cambridge, Massachusetts.

J.D., June, 1976.

Honors: cum laude.

Activities: My third year paper for Professor Victor Brudney was on legal guidelines under the securities laws for disclosure of problem loans by banks. I was also a member of Student Legal Assistance for the Arts and the Harvard Gymnastics Club.

**Undergraduate Education:**

PRINCETON UNIVERSITY, Princeton, New Jersey.

B.A., June, 1973.

Major: Philosophy.

Honors: magna cum laude; Phi Beta Kappa; The Gannett Scholarship. The Philosophy Department awarded the Dickinson Prize for my senior thesis on a topic in the philosophy of language for Professors Gilbert Harman and David Lewis.

Activities: During the summer of 1972, as a research assistant for Professor Walter Kaufmann of the Philosophy Department, I critically reviewed two subsequently published manuscripts, *Without Guilt*

*and Justice* and a translation of Nietzsche's *Die Froehliche Wissenschaft*. My contributions were acknowledged in each book by the author.

**Books and Edited Works:**

*Artificial Intelligence and Legal Analytics: New Tools for Law Practice in the Digital Age*, Kevin D. Ashley, Cambridge University Press (2017).

*Legal Knowledge and Information Systems*, Jurix 2013: The Twenty-Sixth Annual Conference. Kevin D. Ashley (Ed.) IOS Press. Amsterdam (2013).

*The Journal of Writing Research*, Special Issue entitled "Redesigning Peer Review Interactions Using Computer Tools" Schunn, C., Ashley, K. and Goldin, I. (Eds.) 4(2)111-237 (2012).

*International Journal of Artificial Intelligence in Education*, Special Issue on AIED applications for ill-defined domains. Pinkwart, N., Lynch, C., Ashley, K. D., & Aleven, V. (Eds.) vol. 19, No. 3 & 4 (2010).

*Journal of Artificial Intelligence and Law*, Special Issue on e-Discovery. Ashley, K., Baron, J., and Conrad, J. (Eds.) vol. 18, No. 3 (2010).

*Intelligent Tutoring Systems*, Ashley, K.D., Ikeda, M. & Chan, T-W. 8<sup>th</sup> International Conference, ITS 2006. Jhongli, Taiwan. June 2006. Proceedings. Springer, Berlin.

*Case-Based Reasoning Research and Development*, Ashley, K.D. & Bridge, D.G. (Eds.) (2003) 5<sup>th</sup> International Conference on Case-Based Reasoning, ICCBR 2003, Trondheim, Norway, June 2003, Proceedings. Springer, Berlin.

*Textual Case Based Reasoning*. Lenz, M., and K.D. Ashley, editors (1998). Papers from the Workshop held at the Sixteenth National Conference on Artificial Intelligence. AAAI-Technical Report WS-98-12. AAAI Press, Menlo Park, CA.

*Modeling Legal Argument: Reasoning with Cases and Hypotheticals*. Ashley, K.D., (1990). The MIT Press / Bradford Books, Cambridge, MA. Substantially rewritten version of (1987) Ph.D. Dissertation. COINS Technical Report No. 88--01, Department of Computer and Information Science, University of Massachusetts, Amherst.

**Edited Workshop Proceedings:**

*Proceedings of the Workshop on Computer-Supported Peer Review in Education (CSPRED-2010) at the Tenth International Conference on Intelligent Tutoring Systems*. Goldin, I., Brusilovsky, P., Schunn, C., Ashley, K., Hsiao, I-H. (Eds.) (2010). Pittsburgh, PA. <http://www.cspreed.org/proceedings>

*Proceedings of the Workshop on Intelligent Tutoring Systems for Ill-Defined Domains at the 10th International Conference on Intelligent Tutoring Systems (ITS)*. C. Lynch, K. Ashley, A. Mitrovic, V. Dimitrova, N. Pinkwart, V. Aleven, eds. (2010). Pittsburgh, PA, USA.

*Proceedings of the Workshop on Intelligent Tutoring Systems for Ill-Defined Domains at the 9th International Conference on Intelligent Tutoring Systems*. Aleven, V., Ashley, K., Lynch, C., & Pinkwart, N. (Eds.) (2008). Montreal, Canada. <http://www.cs.pitt.edu/~collin/ITS08/>

*Proceedings of the Workshop on AIED Applications for Ill-Defined Domains at the 13th International Conference on Artificial Intelligence in Education*. Aleven, V., Ashley, K., Lynch, C., & Pinkwart, N. (Eds.) (2007). Los Angeles (CA), published online at [http://aied.inf.ed.ac.uk/AIED2007/Ill-Defined\\_Workshop.pdf](http://aied.inf.ed.ac.uk/AIED2007/Ill-Defined_Workshop.pdf)

*Proceedings of the Workshop on Intelligent Tutoring Systems for Ill-Defined Domains at the 8th*

*International Conference on Intelligent Tutoring Systems*. Alevén, V., Ashley, K., Lynch, C., & Pinkwart, N. (Eds.) (2006). Jhongli (Taiwan), National Central University.

**Refereed Articles in Journals and Collections:**

“Experimental Evidence for Diagramming Benefits in Science Writing”. Barstow, B., Fazio, L., Schunn, C., and Ashley, K. (in press), *Instructional Science*, 1-20 (2017).

“The Impacts of Domain-General vs. Domain-Specific Diagramming Tools on Writing”. Barstow, B., Fazio, L., Lippman, J., Falakmasir, M., Schunn, C., and Ashley, K. *International Journal of Artificial Intelligence in Education*. doi:10.1007/s40593-016-0130-z. pp 1–23 (2016).

“Network Analysis of Manually-Encoded State Laws and Prospects for Automation” Sweeney PM, Bjerke EF, Potter MA, Guclu H, Keane CR, Ashley KD, Grabmair M, Hwa R (2014) In Winkels, R; Lettieri, N; Faro, S (Eds.) *Network Analysis in Law*, Collana: Diritto Scienza Tecnologia/Law Science Technology – Temi, 3, pp. 53-78. Napoli: Edizione Scientifiche Italiane.

“Eliciting Formative Assessment in Peer Review”, Goldin, I. and Ashley, K. D. (2012) *Journal of Writing Research*. 4(2) pp. 203-237. Special issue on Redesigning Peer Review Interactions Using Computer Tools.

“Validity and Reliability of an Instrument for Assessing Case Analyses in Bioengineering Ethics Education.” (2015) Goldin, I., Pinkus, R., Ashley, K. *Science and Engineering Ethics*. 21.3: 789-807.

“Emerging AI & Law approaches to automating analysis and retrieval of electronically stored information in discovery proceedings” Ashley, K. and Bridewell, W. (2010) in *Journal of Artificial Intelligence and Law*, Special Issue on e-Discovery. vol. 18, No. 3 pp. 311-320.

“Evaluating an Intelligent Tutoring System for Making Legal Arguments with Hypotheticals.” Pinkwart, N., Ashley, K., Lynch, C. and Alevén, V. (2009) *International Journal of Artificial Intelligence in Education*. vol. 19, pp. 401-424.

“Concepts, Structures, and Goals: Redefining Ill-Definedness.” Lynch, C. Ashley, K. Pinkwart, N., Alevén, V. (2009). *International Journal of Artificial Intelligence in Education*. vol. 19, no. 3, pp. 253-266.

“Teaching a Process Model of Legal Argument with Hypotheticals.” Ashley, K. (2009) *Artificial Intelligence and Law*. Vol. 17, No. 4. pp. 321-370.

“Automatically Classifying Case Texts and Predicting Outcomes.” K. D. Ashley and S. Brüninghaus (2009) In *Artificial Intelligence and Law* Vol. 17, No. 2, pp. 125-165.

“Adaptive Rückmeldungen im intelligenten Tutorensystem LARGO.” Pinkwart, N., Alevén, V., Ashley, K., Lynch, C. (2009). *e-learning and education*, 5. Online journal, URL: <http://eleed.campussource.de/archive/5/1608/>.

“Computer Models for Legal Prediction.” K. D. Ashley and S. Brüninghaus (2006) *Jurimetrics Journal* Vol. 46, pp. 309-352.

“Capturing the Dialectic between Principles and Cases.” K.D. Ashley (2004). In *Jurimetrics* Vol. 44, pp. 229-279.

“Law, Learning and Representation”. Ashley, K. D. & Rissland, E. L. (2003) *Artificial Intelligence*. v. 150, pp. 17-58.

“An AI Model of Case-Based Legal Argument from a Jurisprudential Viewpoint.” K.D. Ashley (2002). In the Special Issue of the *Journal of Artificial Intelligence and Law* in Memory of Professor Donald H. Berman. Volume 10. Nos. 1-3. pp. 163-218.

“Case-based Approaches to Professional Ethics: a systematic comparison of students’ and ethicists’ moral reasoning.” Keefer, M. and Ashley, K.D. (2001) *Journal of Moral Education*. Vol. 30, No. 4 pp.377-398.

“Designing Electronic Casebooks That Talk Back: The CATO Program”. Ashley, K. D. (2000) In *Jurimetrics* Vol. 40, No. 3, pp. 275-319.

“Case-Based Reasoning and its Implications for Legal Expert Systems”. Ashley, K. D. (1992). In *Artificial Intelligence and Law* Vol. 1, No. 2, pp. 113-208. Kluwer. Dordrecht, Netherlands.

“Reasoning with Cases and Hypotheticals in Hypo”. Ashley, K. D. (1991). In *International Journal of Man-Machine Studies*, Vol. 34, pp. 753-796. Academic Press. New York.

“A Case-Based Approach to Modeling Legal Expertise”, Ashley, K.D. & Rissland, E.L. In *IEEE Expert*, Fall, 1988.

#### **Other Journal Articles and Symposia:**

“Teaching Law and Digital Age Legal Practice with an AI and Law Seminar.” Ashley, K. *Chicago Kent Law Review*. 88:3: 783-844 (2013).

“Improving teaching at-scale: Design for the scientific measurement and development of discourse practice”. Correnti R, Stein MK, Smith MS, Scherrer J, McKeown M, Greeno J, Ashley KD. In: Resnick L, Asterhan C, editors. *Socializing Intelligence through Academic Talk and Dialogue*. 2015.

“Comment on Lowrance's ‘Graphical manipulation of evidence in structured arguments’” Ashley, K. (2007) in *Law, Probability and Risk*, 6: 241-245.

“Textual case-based reasoning” Weber, R., Ashley, K. and Brüninghaus, S. (2005) *The Knowledge Engineering Review*, Volume 20, Issue 03, September 2005, pp 255-260.

“Case-based reasoning and law” Rissland, E., Ashley, K. and Branting, L.K. (2005) *The Knowledge Engineering Review*, Volume 20, Issue 03, September 2005, pp 293-298

“A Note on Dimensions and Factors”, Rissland, E.L. and Ashley, K.D. (2002). In the Special Issue of the *Journal of Artificial Intelligence and Law* in Memory of Professor Donald H. Berman. Volume 10. Nos. 1-3. pp. 65-77.

“Legal Reasoning and Artificial Intelligence: How Computers ‘Think’ Like Lawyers”, Kevin Ashley, Karl Branting, Howard Margolis, Cass R. Sunstein (2001) Symposium, *University of Chicago Law School Roundtable* v. 8, p. 1.

“What I Told The Law and Computers Association of Japan About Information Technology in Law School Education.” K.D. Ashley (2001). *University of Pittsburgh Law Review*. v. 62, Summer, pp. 545-578.

#### **Refereed Conference and Workshop Proceedings:**

“Utilizing Vector Space Models for Identifying Legal Factors from Text.” M. Falakmasir and K. Ashley (2017) The 30th International Conference on Legal Knowledge and Information Systems. Jurix 2017. December. Luxembourg.



“Detecting Agent Mentions in U.S. Court Decisions.” J. Savelka and K. Ashley (2017) The 30th International Conference on Legal Knowledge and Information Systems. Jurix 2017. December. Luxembourg.

“Using Conditional Random Fields to Detect Different Functional Types of Content in Decisions of United States Courts with Example Application to Sentence Boundary Detection.” J. Savelka and K. Ashley, to appear in Proceedings, Second Workshop on Automated Detection, Extraction and Analysis of Semantic Information in Legal Texts (ASAIL) June, 2017, London, UK.

“Document Ranking with Citation Information and Oversampling Sentence Classification in the LUIMA Framework,” A. Bansal, Z. Bu, B. Mishra, S. Wang, K. Ashley, and M. Grabmair. in F. Bex (Ed.) Proceedings, 29th Annual Conference on Legal Knowledge and Information Systems (Jurix 2016). Inria Sophia Antipolis Mediterranee, Nice, France.

“Identifying Thesis Statements in Student Essays: The Class Imbalance Challenge and Resolution”. F. Jabbari, M. Falakmasir and K. Ashley. In *Proceedings of the 29th International FLAIRS Conference, Special Track on Applied Natural Language Processing*, Key Largo, Florida, USA. May (2016).

“Putting Argument Mining to Work: an Experiment in Legal Argument Retrieval Using the LUIMA Type System and Pipeline”. K. Ashley (2016) Dagstuhl Seminar 16161– Natural Language Argumentation: Mining, Processing, and Reasoning over Textual Arguments. April.

“A Global Perspective on Argument Diagramming to Support Writing Skills”, K. Ashley, M. Falakmasir (2015) 7th International Conference on Education and New Learning Technologies, *EDULEARN15 Proceedings*, pp. 7354-7363. Barcelona, July.

“Applying an Interactive Machine Learning Approach to Statutory Analysis” Savelka, J., Trivedi, G., & Ashley, K. in A. Rotolo (Ed.) Proceedings, 28th Annual Conference on Legal Knowledge and Information Systems (Jurix 2015). **Best Student Paper Award**. Universidade do Minho, Portugal.

“Introducing LUIMA: An Experiment in Legal Conceptual Retrieval of Vaccine Injury Decisions using a UIMA Type System and Tools”, M. Grabmair, K. D. Ashley, R. Chen, P. Sureshkumar, C. Wang, E. Nyberg and V. R. Walker, Proceedings, Fifteenth International Conference on Artificial Intelligence and Law, ICAIL 2015, 69-78, ACM, 2015.

“Transfer of Predictive Models for Classification of Statutory Texts in Multi-jurisdictional Settings.” J. Šavelka and K. Ashley. In K. Atkinson. *Fifteenth International Conference on Artificial Intelligence and Law (ICAIL 2015)*. New York: ACM, 2015, pp. 216-220.

“Understanding Revision Planning in Peer-Reviewed Writing”, Baikadi, A., Schunn, C., & Ashley, K. (2015). Proceedings of the 8th International Conference on Educational Data Mining, 1-4.

“Applying Argument Extraction to Improve Legal Information Retrieval” Ashley, K. in (Cabrio, E., Villata, S. and Wyner, A., eds.) Proceedings, ArgNLP 2014, Frontiers and Connections between Argumentation Theory and Natural Language Processing. Forli-Cesena, Italy, July 21-25, 2014. CEUR Workshop Proceedings <http://ceur-ws.org/Vol-1341/> pp. 1-9.

“Mining Information from Statutory Texts in Multi-Jurisdictional Settings” Savelka, J., K. Ashley & M. Grabmair in R. Hoekstra (Ed.) Proceedings, 27th Annual Conference on Legal Knowledge and Information Systems (Jurix 2014) pp. 133-142. IOS Press.

“Statutory Network Analysis plus Information Retrieval” K. Ashley, E. Bjerke, M. Potter, H. Guclu, J. Savelka, & M. Grabmair. presented at Second Workshop on Network Analysis in Law at the 27th Annual Conference on Legal Knowledge and Information Systems (Jurix 2014) Krakow, December, 2014.

“Automatically Extracting Arguments from Legal Texts: a Position Paper” K. Ashley, The 1st International Workshop for Methodologies for Research on Legal Argumentation (MET-ARG) at The 27th International Conference on Legal Knowledge and Information Systems (Jurix 2014) Kraków, December, 2014.

“Empirically Valid Rules for Ill-Defined Domains” Lynch, C, Falakmasir, M, and Ashley, KD. In Proceedings, 7<sup>th</sup> International Conference on Educational Data Mining, pp. 237-240 London (2014). July.

“Matching Hypothesis Text in Diagrams and Essays” Lynch, C, Falakmasir, M & Ashley, KD In Proceedings, 7<sup>th</sup> International Conference on Educational Data Mining, pp. 383-384 London (2014). July.

"Can Diagrams Predict Essay Grades?" Lynch, C, Ashley, KD, and Chi M. In Proceedings, 12<sup>th</sup> International Conference on Intelligent Tutoring Systems, Lecture Notes in Computer Science, v. 8474. pp. 260-265 Springer (2014).

“Identifying Thesis and Conclusion Statements in Student Essays to Scaffold Peer Review” Falakmasir MH, Ashley KD, Schunn C, and Litman D. In Proceedings, 12<sup>th</sup> International Conference on Intelligent Tutoring Systems, Lecture Notes in Computer Science, v. 8474. pp. 254-259. Springer (2014).

“From Information Retrieval (IR) to Argument Retrieval (AR) for Legal Cases: Report on a Baseline Study” Ashley, KD, Walker, V. In: Ashley, KD, editor. Proceedings of the 26th Annual Conference on Legal Knowledge and Information Systems (Jurix 2013) p. 29-38. Bologna. IOS Press:Amsterdam (2013).

“Network Analysis of Manually-Encoded State Laws and Prospects for Automation” P. Sweeney, E. Bjerke, M. Potter, H. Guclu, C. Keane, K. Ashley, M. Grabmair and R. Hwa. presented at Workshop on Network Analysis in Law at the XIV International Conference on AI and Law (ICAIL 2013) Rome, June 14, 2013.

“Toward Constructing Evidence-Based Legal Arguments Using Legal Decision Documents and Machine Learning.” Research Abstract. Ashley, KD, Walker, V. In: Proceedings of the Fourteenth International Conference on Artificial Intelligence and Law. ICAIL 2013; pp. 176-180. Jun 10-14; Rome, Italy.

“Using Event Progression to Enhance Purposive Argumentation in the Value Judgment Formalism”. Grabmair M, Ashley KD. In: Proceedings of the Fourteenth International Conference on Artificial Intelligence and Law. ICAIL 2013; pp. 73-82. Jun 10-14; Rome, Italy 2013.

“Using Argument Diagramming to Improve Peer Grading of Writing Assignments.” M. H. Falakmassir, K. D. Ashley, C. D. Schunn, In Proceedings of the 1st Workshop on Massive Open Online Courses (moochop) at the 16th Annual Conference on Artificial Intelligence in Education (AIED 2013). Memphis, TN.

“Comparing Argument Diagrams”. Lynch C, Ashley KD, Falakmassir MH (2012) In: Schafer B, editor. Proceedings of the 25th Annual Conference on Legal Knowledge and Information Systems (Jurix 2012) Amsterdam: IOS Press p. 81-90.

“Modeling Student Arguments in Research Reports”. Lynch C, Ashley KD. (2012) In: Duffy V, editor. Proceedings of the 4th AHFE Conference. Advances in Applied Human Modeling and Simulation Advances in Human Factors and Ergonomics Jul 21-25; San Francisco CRC Press: Taylor and Francis Group.

"Toward AI-enhanced Computer-supported Peer Review in Legal Education." Ashley, K.D and Goldin, I.M. (2011) Jurix 2011: The 24th Annual Conference, pp. 1-12 (Katie M. Atkinson ed.) IOS Press 2011.

“Toward Extracting Information from Public Health Statutes using Text Classification and Machine Learning” M. Grabmair, K.D. Ashley, R. Hwa and P.M. Sweeney (2011) Jurix 2011: The 24th Annual

Conference, pp. 73-82 (Katie M. Atkinson ed.) IOS Press 2011.

"Peering Inside Peer Review with Bayesian Models." Goldin, Ilya M., Kevin D. Ashley. (2011) *Proceedings of the [15th International Conference on Artificial Intelligence in Education](#)*. Lecture Notes in Computer Science, 6738, pp. 90-97. Auckland, New Zealand

"Facilitating Case Comparison Using Value Judgments and Intermediate Legal Concepts." Grabmair, M. and Ashley, K.D. (2011) *Proceedings Thirteenth International Conference on Artificial Intelligence and Law (ICAIL 2011)*, pp. 161-170. ACM Press. **Donald H. Berman Award for Best Student Paper**

"Can Temporal Representation and Reasoning make a Difference in Automated Legal Reasoning? Lessons from an AI-based Ethical Reasoner." McLaren, Bruce M. and Ashley, Kevin D. (2011) *Proceedings Thirteenth International Conference on Artificial Intelligence and Law (ICAIL 2011)*, pp. 229-238. ACM Press.

"Argumentation with Value Judgments - An Example of Hypothetical Reasoning." Grabmair, M. and Ashley, K.D. (2010) *Jurix 2010: The 23rd Annual Conference*, 67-76 (R.G.F. Winkels ed.) IOS Press.

"Eliciting Informative Feedback in Peer Review: Importance of Problem-Specific Scaffolding". Goldin, I., Ashley, K. (2010) *Proceedings of the [10th International Conference on Intelligent Tutoring Systems](#)*. Lecture Notes in Computer Science 6094. pp. 95-104. Pittsburgh, USA.

"Learning by Reviewing through Peer Feedback Refinement." Goldin, Ilya M., Kevin D. Ashley. (2010) *Proceedings of the Workshop on Computer-Supported Peer Review in Education, 10th International Conference on Intelligent Tutoring Systems*. Pittsburgh, USA

"Borderline Cases of Ill-definedness – and How Different Definitions Deal with Them." Ashley, K., Lynch, C., Pinkwart, N., Alevén. (2010) *Proceedings of Workshop on Intelligent Tutoring Technologies for Ill-Defined Problems and Ill-Defined Domains. (ITS Workshop)*, Pittsburgh, PA, June.

"Argument Diagramming and Diagnostic Reliability." Lynch, C., Ashley, K. D., Pinkwart, N., & Alevén, V. (2009). In Guido Governatori (Ed.) *Legal Knowledge and Information Systems, Jurix 2009: The Twenty-Second Annual Conference*. p. 106-115. Amsterdam, IOS Press

"Ontological Requirements for Analogical, Teleological, and Hypothetical Legal Reasoning" Ashley, K. (2009) In *Proceedings of the Twelfth International Conference on Artificial Intelligence and Law*. pp. 1-10. ACM Press. Barcelona, June.

"What a Legal CBR Ontology Should Provide." Ashley, K. (2009) In *Proceedings of the 22d International FLAIRS Conference, Special Track on Case-Based Reasoning*, Sanibel Island, Florida, USA. May.

"Using Critical Questions to Disambiguate and Formalize Statutory Provisions." Grabmair, M. and Ashley, K. (2009) In *Proceedings of the Twelfth International Conference on Artificial Intelligence and Law*. pp. 240-1. ACM Press. Barcelona, June.

"Toward Assessing Law Students' Argument Diagrams." Lynch, C., Ashley, K., Pinkwart, N., and Alevén, V. (2009) In *Proceedings of the Twelfth International Conference on Artificial Intelligence and Law*. pp. 222-3. Barcelona, June.

"Assessing Argument Diagrams in an Ill-Defined Domain." Pinkwart, N., Lynch, C., Ashley, K. and Alevén, V. (2009) In V. Dimitrova, R. Mizoguchi, B. du Boulay, & A. Graesser (Eds.), *Proceedings of the 14th International Conference on Artificial Intelligence in Education*. pp. 590-592. Amsterdam (The Netherlands), IOS Press. Brighton. July.

"Toward Modeling and Teaching Legal Case-based Adaptation with Expert Examples" Ashley, K., Lynch,

C., Pinkwart, N., and Alevén, V. (2009) In *Proceedings of the 8<sup>th</sup> International Conference on Case-Based Reasoning. Lecture Notes in Computer Science 5650* pp. 45-59. Berlin (Germany), Springer. Seattle. July.

“Finding the Flattening Line: Using Critical Questions to Disambiguate and Formalize Statutory Provisions: How to interface to a lawyer’s understanding of complexity in codified law.” Grabmair, M. and Ashley, K. (2009) Two-page Research Abstract to appear in *Proceedings of the Twelfth International Conference on Artificial Intelligence and Law*. ACM Press. Barcelona, June.

“A Process Model of Legal Argument with Hypotheticals.” Ashley, K., Lynch, C., Pinkwart, N., Alevén, V. (2008). In *Legal Knowledge and Information Systems, Proceedings of Jurix 2008: 21st Annual Conference*, pp. 1-10. Firenze, December.

“Reevaluating LARGO in the Classroom: Are Diagrams Better than Text for Teaching Argumentation Skills?” Pinkwart, N., Lynch, C., Ashley, K., and Alevén, V. (2008) In *Proceedings of the 9th International Conference on Intelligent Tutoring Systems*. Pp. 90-100. Montreal, June.

“Graph Grammars: an ITS Technology for Diagram Representations” Pinkwart, N., Ashley, K., Alevén, V. and Lynch, C. (2008) In *Proceedings of The 21st International FLAIRS Conference, Special Track on Intelligent Tutoring Systems*, pp. 433-438. Coconut Grove, Florida, USA. May.

“Argument Graph Classification with Genetic Programming and C4.5”, Lynch, C., Ashley, K., Pinkwart, N., and Alevén V. (2008) In *Proceedings of the 1<sup>st</sup> International Conference on Educational Data Mining*. Pp. 137-146 Montreal, Quebec, Canada. June.

“What do argument diagrams tell us about students’ aptitude or experience? A statistical analysis in an ill-defined domain,” Lynch, C., Pinkwart, N., Ashley, K., and Alevén, V. (2008). In *Proceedings of the Workshop on ITSs for Ill-structured Domains: Focusing on Assessment and Feedback at the 9th International Conference on Intelligent Tutoring Systems*. Montreal, Quebec, Canada. June. <http://www.cs.pitt.edu/~collin/ITS08/>

“Evaluating Legal Argument Instruction with Graphical Representations using LARGO”, Pinkwart, N., Alevén, V., Ashley, K., Lynch, C. (2007) In R. Luckin, K. Koedinger, & J. Greer (Eds.), *Proceedings of the 13th International Conference on Artificial Intelligence in Education (AIED2007)* p. 101-108. Amsterdam (Niederlande), IOS Press.

“Argument diagramming as focusing device: does it scaffold reading?” Lynch, C., Ashley, K., Pinkwart, N., & Alevén, V. (2007). In V. Alevén, K. Ashley, C. Lynch, & N. Pinkwart (Eds.), *Proceedings of the Workshop on “AIED Applications in Ill-Defined Domains” at the 13th Conference on Artificial Intelligence in Education* (p. 51-60). Los Angeles (CA), [http://aied.inf.ed.ac.uk/AIED2007/III-Defined\\_Workshop.pdf](http://aied.inf.ed.ac.uk/AIED2007/III-Defined_Workshop.pdf)

“Interpretive Reasoning with Hypothetical Cases”, Ashley, K. (2007) *Proceedings of The 20th International FLAIRS Conference, Special Track on Case-Based Reasoning*, Key West, Florida, USA. May.

“Learning by Diagramming Supreme Court Oral Arguments”, Ashley, K., Pinkwart, N., Lynch, C., Alevén, V. (2007) In *Proceedings of the 11th International Conference on Artificial Intelligence and Law (ICAIL-07)* p. 271-275. New York (NY), ACM Press.

“Student’s Usage of Multiple Linked Argument Representations in LARGO.” Pinkwart, N., Lynch, C., Ashley, K., Alevén, V. (2007). In T. Gross, ed., *Tagungsband der 7. Konferenz für interaktive und kooperative Medien (Mensch & Computer)* (p. 245 - 250). Munich, Germany, Oldenbourg Verlag.

“Assessing Case Analyses in Bioengineering Ethics Education: Reliability and Training”, Goldin, I., Ashley, K., Pinkus, R. (2006) International Conference on Engineering Education (ICEE-2006) Puerto

“Toward Legal Argument Instruction with Graph Grammars and Collaborative Filtering Techniques” Pinkwart, N., Alevén, V., Ashley, K., Lynch, C. (2006) In M. Ikeda, K. Ashley, & T. W. Chan (Eds.), *Lecture Notes in Computer Science 4053: Proceedings of the 8th International Conference on Intelligent Tutoring Systems* (p. 227-236). Berlin, Springer.

“Progress in Textual Case-Based Reasoning: Predicting the Outcome of Legal Cases from Text”, Brüninghaus, S. and Ashley K. (2006) *Proceedings, Twenty-First National Conference on Artificial Intelligence (AAAI-06)* pp. 1577-1580. Boston. July.

"Teaching Case Analysis through Framing: Prospects for an ITS in an ill-defined domain" Goldin, I., Ashley, K., and Pinkus, R. (2006) ITS 2006 Workshop on "Intelligent Tutoring Systems for Ill-Defined Domains" Jhongli, Taiwan. June 2006.

"Supporting Self-explanation of Argument Transcript: Specific v. Generic Prompts" Alevén, V., Pinkwart, N., Ashley, K., Lynch, C. (2006) In V. Alevén, K. Ashley, C. Lynch, & N. Pinkwart (Eds.), *Proceedings of the Workshop on Intelligent Tutoring Systems for Ill-Defined Domains at the 8th International Conference on Intelligent Tutoring Systems* (p. 47-55). Jhongli (Taiwan), National Central University.

"Defining Ill-Defined Domains; A literature survey." Lynch, C., Ashley, K., Alevén, V., Pinkwart, N. (2006) In V. Alevén, K. Ashley, C. Lynch, & N. Pinkwart (Eds.), *Proceedings of the Workshop on Intelligent Tutoring Systems for Ill-Defined Domains at the 8th International Conference on Intelligent Tutoring Systems* (p. 1-10). Jhongli (Taiwan), National Central University.

“Using Collaborative Filtering in an Intelligent Tutoring System for Legal Argumentation.”. Pinkwart, N., Alevén, V., Ashley, K., Lynch, C. (2006). In S. Weibelzahl, A. Cristea, eds., *Lecture Notes in Learning and Teaching - Proceedings of Workshops held at the 4th International Conference on Adaptive Hypermedia and Adaptive Web-Based Systems (AH)* (p. 542 - 551). Dublin, Ireland, National College of Ireland.

“Schwachstellenermittlung und Rückmeldungsprinzipien in einem intelligenten Tutorensystem für juristische Argumentation.” Pinkwart, N., Alevén, V., Ashley, K., Lynch, C. (2006). In M. Mühlhäuser, G. Rößling, R. Steinmetz, eds., *GI Lecture Notes in Informatics (P-87) - Tagungsband der 4. e-Learning Fachtagung Informatik (DeLFI)* (p. 75 - 86). Bonn, Germany, Köllen Verlag. **Best Paper Award**.

“Reasoning with Textual Cases.” Brüninghaus, S. and Ashley K. (2005) In the *Proceedings of the Sixth International Conference on Case-Based Reasoning*. pp. 137-151. Chicago. August. Springer.

“Generating Legal Arguments and Predictions from Case Texts,” Brüninghaus, S. and Ashley K. (2005) In the *Proceedings of the Tenth International Conference of AI and Law*. pp. 65-74. Bologna. June. ACM Press.

“Helping Law Students to Understand US Supreme Court Oral Arguments: A Planned Experiment.” Alevén, V., Ashley, K. and Lynch, C. (2005) In the *Proceedings of the Tenth International Conference of AI and Law*. pp. 55-59. Bologna. June. ACM Press.

“Towards Modeling Systematic Interpretation of Codified Law,” Grabmair, M. and Ashley, K. (2005) In M.-F. Moens and P. Spyns (eds.) *Legal Knowledge and Information Systems*, the Proceedings of the Eighteenth Annual Conference (JURIX 2005). pp. 107-8. Brussels. December. IOS Press.

“Toward Supporting Hypothesis Formation and Testing in an Interpretive Domain.” Alevén, V. and Ashley, K. (2005) In the *Proceedings of the Twelfth International Conference on Artificial Intelligence in Education*, Amsterdam. July.

“A Predictive Role for Intermediate Legal Concepts,” Ashley, K. and Brüninghaus, S. (2003). In the *Proceedings 16th Annual Conference on Legal Knowledge and Information Systems*, Jurix-03. pp. 153-162. Utrecht, The Netherlands. December. IOS Press, Amsterdam.

“Combining Case-Based and Model-Based Reasoning for Predicting the Outcome of Legal Cases”. Brüninghaus, S. and Ashley, K.D. (2003). In the *Proceedings of the Fifth International Conference on Case-Based Reasoning (ICCBR-03)*. pp. 65-79. Trondheim, Norway. June. Springer, Berlin.

“Predicting Outcomes of Case-Based Legal Arguments.” Brüninghaus, S. and Ashley, K.D. (2003). In the *Proceedings of the Ninth International Conference on Artificial Intelligence and Law (ICAIL-03)*. pp. 234-242. Edinburgh, Scotland. June. ACM Press.

“Teaching Case-Based Argumentation Concepts using Dialectic Arguments vs. Didactic Explanations”. Ashley, K.D., Desai, R. and Levine, J.M. (2002) In *Proceedings, Intelligent Tutoring Systems Conference, ITS '02* (S.A. Cerri, G. Gouardères, F. Paraguaçu, ed.) Lecture Notes in Computer Science. Pp. 585-595. Springer-Verlag: Berlin.

“Teaching with Dialectic Arguments vs. Didactic Explanations” Desai, R. and Ashley, K.D. (2002). In *Proceedings of the 24th Annual Conference of the Cognitive Science Society*. Fairfax, VA. August.

“An AI Investigation of Citation's Epistemological Role”. Ashley, K.D. and McLaren, B.M. (2001). In the *Proceedings of the Eighth International Conference on Artificial Intelligence & Law (ICAIL-01)*. pp. 32-41. ACM Press.

“Improving the Representation Of Legal Case Texts With Information Extraction Methods”. Brüninghaus, S. and Ashley, K.D. (2001). In the *Proceedings of the Eighth International Conference on Artificial Intelligence & Law (ICAIL-01)*. pp. 42-51. ACM Press.

“Introducing PETE: Computer Support For Teaching Ethics”. Goldin, I., Ashley, K.D. and Pinkus, R. (2001). In the *Proceedings of the Eighth International Conference on Artificial Intelligence & Law (ICAIL-01)*. pp. 94-98. ACM Press.

“Helping a CBR Program Know What it Knows”. McLaren, B.M. and Ashley, K.D. (2001). In the *Proceedings of the Fourth International Conference on Case-Based Reasoning. (ICCBR-01) Case-Based Reasoning Research and Development*, (Aha, D. and Watson, I. eds.) Lecture Notes in AI Nr. 2080. pp. 377-391. Springer.

“The Role of Information Extraction for Textual CBR”. Brüninghaus, S. and Ashley, K.D. (2001). In the *Proceedings of the Fourth International Conference on Case-Based Reasoning. (ICCBR-01). Case-Based Reasoning Research and Development*, (Aha, D. and Watson, I. eds.) Lecture Notes in AI Nr. 2080. pp. 74-89. Springer.

“Assessing Relevance With Extensionally Defined Principles and Cases”. McLaren, B.M. and Ashley, K.D. (2000). In *Proceedings of the 17th National Conference of Artificial Intelligence (AAAI-00)*. pp. 316-322. Austin. August. AAAI Press, Menlo Park, CA.

“Toward Adding Knowledge to Learning Algorithms for Indexing Legal Cases”. Brüninghaus, S. and Ashley, K.D. (1999). In *Proceedings, Seventh International Conference on Artificial Intelligence and Law*, pp. 9-17. Association of Computing Machinery, New York. Oslo. June. **Donald H. Berman Award for Best Student Paper** <http://www.pitt.edu/~steffi/papers/icail99.ps>

“Bootstrapping Case Base Development with Annotated Case Summaries”. Brüninghaus, S. and Ashley, K.D. (1999). In (Althoff, K.-D., Bergmann, R. and Branting, L.K. eds.) *Case-Based Reasoning Research and Development, Proceedings of the Third International Conference On Case-Based Reasoning*. pp.59-73.

Munich, Germany. July. Lecture Notes in Artificial Intelligence No. 1650. Springer: Berlin. **Outstanding Research Paper Award**. <http://www.pitt.edu/~steffi/papers/iccbr99.ps>

“Case Representation, Acquisition, and Retrieval in SIROCCO”. McLaren, B. and Ashley, K. (1999) In *Proceedings of the Third International Conference on Case-Based Reasoning (ICCB-99)*. Lecture Notes in Artificial Intelligence 1650. Althoff, K.-D., Bergmann, R. and Branting, L.K. (ed.) pp. 248-262. Springer: Berlin. Seeon, Germany. July.

“Exploring the Dialectic between Abstract Rules and Concrete Facts”. McLaren, B. and Ashley, K.D. (1998) in *Advances in Case-Based Reasoning. Proceedings, Fourth European Workshop on Case-Based Reasoning (EWCBR-98)* Dublin. September. B. Smyth and P. Cunningham (ed.) pp. 37-51. Lecture Notes in Artificial Intelligence 1488. Springer: Berlin.

“Developing Mapping and Evaluation Techniques for Textual CBR”. Ashley, K.D., and St. Bruninghaus (1998) In *Textual Case-Based Reasoning Papers from the AAAI-98 Workshop*. Pages 20 - 23. AAAI Technical Report WS-98-12. AAAI Press, Menlo Park, CA.

“Evaluation of Textual CBR Approaches”. Bruninghaus, S. and Ashley, K.D. (1998) *Textual Case-Based Reasoning*. Papers from the AAAI-98 Workshop. pp. 30-34. AAAI Technical Report WS-98-12. AAAI Press, Menlo Park, CA.

“How Machine Learning Can be Beneficial for Textual Case-Based Reasoning”. Bruninghaus, St., and K.D. Ashley (1998b) In *Proceedings of the AAAI-98/ICML-98 Workshop on Learning for Text Categorization*. Pages 71-74. AAAI Technical Report WS-98-05. AAAI Press, Menlo Park, CA.

“Reasoning Symbolically About Partially Matched Cases”. Ashley, K.D. and Alevan, V. (1997). In *Proceedings of the Fifteenth International Joint Conference on Artificial Intelligence (IJCAI-97)* pp. 335-341. Morgan Kaufmann: San Francisco. Nagoya, Japan. August.

“Teaching Case-Based Argumentation Through a Model and Examples, Empirical Evaluation of an Intelligent Learning Environment”. Alevan, V. and Ashley, K.D. (1997) In *Proceedings of the Eighth World Conference of the Artificial Intelligence in Education Society*. B. du Boulay and R. Mizoguchi, ed. pp. 87-94. IOS Press: Amsterdam. Kobe, Japan. August.

“Evaluating a Learning Environment for Case-Based Argumentation Skills”. V. Alevan and K. Ashley. (1997). In *Proceedings of the Sixth International Conference on Artificial Intelligence and Law, ICAIL-97*. Melbourne, Australia. June. pp. 170-179. Association for Computing Machinery: New York, NY.

“Learning to Classify Case Opinions under Abstract Fact Categories”. S. Bruninghaus and K. Ashley. (1997) In *Proceedings of the Sixth International Conference on Artificial Intelligence and Law, ICAIL-97*. Melbourne, Australia. June. pp. 123-131. Association for Computing Machinery: New York, NY.

“Using Machine Learning for Assigning Indices to Textual Cases”. S. Bruninghaus and K. Ashley. (1997) In *Case-Based Reasoning Research and Development Proceedings of the Second International Conference on Case-Based Reasoning, ICCBR-97*. Providence, RI. July. pp. 303-314. Springer: Berlin.

“Ethical reasoning strategies and their relation to case-based instruction: Some preliminary results”. Ashley, K. D. and Keefer, M. (1996). In *Proceedings of the Eighteenth Annual Conference of the Cognitive Science Society* pp. 483-488. LaJolla, CA. Lawrence Erlbaum: Mahwah, NJ.

“How different is different? Arguing about the significance of similarities and differences”. Alevan, V. and Ashley, K. D. (1996). In *Proceedings of the Third European Workshop on Case-Based Reasoning. Lecture Notes in Artificial Intelligence 1168*. Smith, I. and Faltings, B. (ed.) pp. 1-15. Springer: Berlin. Lausanne, Switzerland. November.

“Reasoning with Reasons in Case-Based Comparisons”. Ashley, K. D. and McLaren, B. (1995) In *Proceedings of the First International Conference on Case-Based Reasoning (ICCBR-95) Lecture Notes in Artificial Intelligence 1010*. Veloso, M. and Aamodt, A. (ed.) pp. 133-144. Springer: Berlin. **Distinguished Paper Award**. Sesimbra, Portugal. October.

“Doing Things with Factors”. Aleven, V. and Ashley, K. D. (1995) In *Proceedings of the Fifth International Conference on Artificial Intelligence and Law* pp. 31-41. Association for Computing Machinery: New York. College Park, MD. May.

“Representing Methods of Legal Analysis Imposed by Treaties and Statutes”. K. D. Ashley and S. Brueninghaus (1995). In *Proceedings of The Third International Workshop on a Legal Expert System for the CISG*, College Park, MD. May.

“Context Sensitive Case Comparisons in Practical Ethics: Reasoning About Reasons”. McLaren, B. and Ashley, K. D. (1995). In *Proceedings of the Fifth International Conference on Artificial Intelligence and Law* pp. 316-325. Association for Computing Machinery: New York. College Park, MD. May.

“Case-Based Comparative Evaluation in TRUTH-TELLER”. McLaren, B. and Ashley, K. D. (1995) In *Proceedings of the Seventeenth Annual Conference of the Cognitive Science Society* pp. 72-77. Lawrence Erlbaum Assoc.: Mahwah, NJ. Pittsburgh. July.

“Using a Well-Structured Model to Teach in an Ill-Structured Domain”. Aleven, V. and Ashley, K. D. (1995). In *Proceedings of the Seventeenth Annual Conference of the Cognitive Science Society* pp. 419-424. Lawrence Erlbaum Assoc.: Mahwah, NJ. Pittsburgh. July.

“An Instructional Environment for Practicing Argumentation Skills”. Aleven, V. and Ashley, K. D. (1994) In *Proceedings of the Twelfth National Conference on Artificial Intelligence (AAAI-94)*. pp. 485-492. Seattle, WA. July. AAAI Press: Menlo Park, CA.

“Evaluating Comparative Evaluation Models”, Ashley, K. D. and McLaren, B. (1994) In *Proceedings of AAAI-94 Workshop on Case-Based Reasoning*. pp. 164-171. Seattle, WA. July.

“A CBR Knowledge Representation for Practical Ethics”. Ashley, K. D. and McLaren, B. (1994). In *Proceedings of Second European Workshop on Case-Based Reasoning (EWCBR-94)* Chantilly, France. November. Reprinted in J. Haton, M. Keane, M. Manago (eds.) *Advances in Case-Based Reasoning* “Lecture Notes in Artificial Intelligence” No. 984 pp. 181-197. Springer Verlag: Berlin.

“Using Logic to Reason with Cases”. Ashley, K. D. and Aleven, V. (1993) In *Proceedings of First European Workshop on Case-Based Reasoning (EWCBR-93)* pp. 373-378, SEKI Report SR-93-12 (SFB 314) Fachbereich Informatik, Universitat Kaiserslautern: Kaiserslautern, Germany. A longer version entitled “A Logical Representation for Relevance Criteria” appeared in 1994 in *Topics in Case-Based Reasoning*. S. Wess, K-D. Althoff, M. Richter, (eds.). pp. 338-352 Springer Verlag Lecture Notes in AI series. Berlin.

“What Law Students Need to Know to WIN”. Aleven, V. and Ashley, K. D. (1993). In *Proceedings of the Fourth International Conference on Artificial Intelligence and Law (ICAIL-93)* pp. 152--161. ACM Press: New York, NY. Reprinted in *International Yearbook of Law, Computers and Technology*, Vol. 8, 1994.

“Generating Dialectical Examples Automatically”. Ashley, K. D. and Aleven, V. (1992) In *Proceedings, Tenth National Conference on Artificial Intelligence (AAAI-92)* pp. 654--660. AAAI Press/The MIT Press: Menlo Park, CA, Cambridge, MA.

“Automated Generation of Examples for a Tutorial in Case-Based Argumentation”. Aleven, V. and Ashley, K. D. (1992) In C. Frasson, G. Gauthier and G.I. McCalla, editors, *Proceedings, Second International Conference on Intelligent Tutoring Systems (ITS-92)* pp. 575--584. Springer-Verlag: Berlin.



“Toward an Intelligent Tutoring System for Teaching Law Students to Argue with Cases”. Ashley, K.D. and Alevan, V. (1991) In *Proceedings, Third International Conference on AI and Law (ICAIL-91)*. pp. 42--52 ACM Press: Baltimore.

“A Computational Approach to Explaining Case-Based Concepts of Relevance in a Tutorial Context”. Ashley, K.D. and Alevan, V. (1991) In *Proceedings of the Defense Advanced Research Projects Agency (DARPA) Case-Based Reasoning Workshop*. pp. 257--268. Morgan Kaufmann: San Mateo, CA.

“Toward an Intelligent Case-Based Tutorial Program for Teaching Students to Argue with Cases”. Ashley, K. D. (1991). In *Proceedings of the Stanford Spring Symposium on Argumentation and Belief* at Stanford University. March.

“Defining Salience in Case-Based Arguments”. Ashley, K. D. (1989). In N.S. Sridharan, editor, *Proceedings, Eleventh International Joint Conference on Artificial Intelligence (IJCAI-89)*. pp. 537--542. Morgan Kaufmann: San Mateo, CA.

“Toward a Computational Theory of Arguing with Precedents: Accommodating Multiple Interpretations of Cases”. Ashley, K. D. (1989). In *Proceedings, Second International Conference on Artificial Intelligence and Law*. pp. 93--102. ACM Press: Baltimore.

“Waiting on Weighting: A Symbolic Least Commitment Approach”. Ashley, K. D. & Rissland, E. L. (1988). In *Proceedings, American Association for Artificial Intelligence, Seventh National Conference on Artificial Intelligence (AAAI-88)*. pp. 234--239. Morgan Kaufmann: San Mateo, CA.

“Reasoning Adversarially with Cases and Factors”. Ashley, K.D. (1988). In *Proceedings, AAAI Workshop on Case-Based Reasoning, AAAI-88*. St. Paul, MN. August.

“Credit Assignment and the Problem of Competing Factors in Case-Based Reasoning”. Rissland, E.L. & Ashley, K.D. (1988). In J. L. Kolodner, editor, *Proceedings of the Defense Advanced Research Projects Agency (DARPA) Case-Based Reasoning Workshop*. pp. 327--344. Morgan Kaufmann: San Mateo, CA.

“Dynamic Assessment of Relevancy in a Case-Based Reasoner”. Ashley, K.D. & Rissland, E.L. In *Proceedings of the Fourth IEEE Conference on Artificial Intelligence Applications*, San Diego, 1988.

“Compare and Contrast, A Test of Expertise”. Ashley, K.D. & Rissland, E.L. (1987). In *Proceedings, American Association for Artificial Intelligence, Sixth National Conference on Artificial Intelligence (AAAI-87)*. pp. 273--278. Morgan Kaufmann: San Mateo, CA.

“But, See, Accord: Generating *Blue Book* Citations in Hypo”. Ashley, K.D. & Rissland, E.L. (1987). In *Proceedings, First International Conference on Artificial Intelligence and Law*. pp. 67--74. ACM Press: Baltimore.

“A Case-Based System for Trade Secrets Law”. Rissland, E.L. & Ashley, K.D. (1987). In *Proceedings, First International Conference on Artificial Intelligence and Law*. pp. 60-66. ACM Press: Baltimore.

“Distinguishing -- A Reasoner's Wedge”. Ashley, K.D. (1987). In *Proceedings Ninth Annual Conference of the Cognitive Science Society*. Seattle, WA. August.

“Hypotheticals as Heuristic Device”. Rissland, E.L. & Ashley, K.D. (1986). In *Proceedings, American Association for Artificial Intelligence, Fifth National Conference on Artificial Intelligence (AAAI-86)*. pp. 289--297. Morgan Kaufmann: San Mateo, CA.

“Knowing What to Ask Next and Why: Asking Pertinent Questions Using Cases and Hypotheticals”. Ashley, K.D. (1986). In *Proceedings Eighth Annual Conference of the Cognitive Science Society*. Amherst, MA. August.

“Explaining and Arguing with Examples”. Rissland, E. L., Valcarce, E. M. & Ashley, K. D. (1984). In *Proceedings, American Association for Artificial Intelligence, Fourth National Conference on Artificial Intelligence (AAAI-84)*. pp. 288--294. Morgan Kaufmann: San Mateo, CA.

### **Invited Papers Not Refereed**

“Hypothesis Formation and Testing in Legal Argument.” Ashley, K.D. (2006). Invited paper. International Congress of Comparative Cultures and Legal Systems of the Instituto de Investigaciones Jurídicas Second International Meeting on Artificial Intelligence and Law, Universidad Nacional Autónoma de México, Mexico City. April, 2006.

“Teaching Creative Legal Reasoning with Examples from Supreme Court Oral Arguments.” Ashley, K., Alevén, V. and Lynch, C. (2005). In *Proceedings of the ICAIL-05 Workshop on Artificial Intelligence and Legal Education*. pp. 47-52 Bologna. June.

“Case-Based Models of Legal Reasoning in a Civil Law Context.” Ashley, K.D. (2004). Invited paper. International Congress of Comparative Cultures and Legal Systems of the Instituto de Investigaciones Jurídicas, Universidad Nacional Autónoma de México, Mexico City. Translated into Spanish. February.

“Exploring an Example of Creative Legal Problem Solving: Inventing the NOW Account.” Ashley, K.D. (2003). Invited paper for the Special Workshop of the IVR World Congress 2003 on Creativity in Legal Problem Solving. Lund, Sweden. August.

“Law School Education and Information Technology”. Ashley, K.D. (2000). Invited paper for the 25th Annual Meeting of The Law and Computers Association of Japan. November.

“Applying Textual Case-Based Reasoning and Information Extraction in Lessons Learned Systems”. Ashley, K. D. (2000). In *Papers from the AAAI Workshop on Intelligent Lessons Learned Systems*. Technical Report WS-00-03. pp. 1-4. AAAI Press. Menlo Park, CA.

“Adding an Intelligent Tutor to an Electronic Legal Casebook”. Ashley, K.D. (1998). In *Proceedings, Fifth International Conference on Substantive Technology in Law School and Law Practice*, Stockholm, July.

“Evaluating a case argument tutoring program with a first year legal writing section”. Ashley, K. D. and Alevén, V (1996). In *Proceedings of the 4th International Conference on Substantive Technology in the Law School and Law Practice* pp. 100-116. University of Montreal.

### **Book Chapters:**

“Mining Information from Statutory Texts: a Case Study” Ashley KD (to appear) In: Bommarito M, Dolin R, and Katz D, editors. *Legal Informatics*. Cambridge University Press: Cambridge, UK.

“Precedent and Analogy” Ashley KD (to appear) In: Bongiovanni G, Valentini C, Postema G, Rotolo A, Sartor G and Walton D, editors. *Handbook of Legal Reasoning and Argumentation*. Springer: Heidelberg.

“Evaluating the uses of values in 'A model of legal reasoning with cases incorporating theories and values'” Ashley KD (2013) In: Prakken H, Atkinson K, Wyner A, editors. *From Knowledge Representation to Argumentation in AI, Law and Policy Making*, A Festschrift in Honour of Trevor Bench-Capon on the Occasion of his 60<sup>th</sup> Birthday. p. 11-37 College Publications: London.

“A Survey of Uncertainties and their Consequences in Probabilistic Legal Argumentation,” by M. Grabmair & K. D. Ashley (2012) in (Frank Zenker, ed.) *Bayesian Argumentation*. pp. 61-86. Springer. Dordrecht.

“The Case-Based Reasoning Approach: Ontologies for Analogical Legal Argument,” by K. D. Ashley (2011) in (Sartor, G., Casanovas, P., Biasiotti, M., Fernandez-Barrera, M., eds.) *Approaches to Legal Ontologies*. pp. 99-115. Springer. Dordrecht.

“Ill-Defined Domains and Adaptive Tutoring Technologies”, Lynch, C., Ashley, K. D., Pinkwart, N., & Aleven, V. (2012). In Durlach, P. & Lesgold, A. M (Eds.) *Adaptive Technologies for Training and Education*. pp. 179-203. Cambridge University Press.

“Instructional Explanations in a Legal Classroom: Are Students’ Argument Diagrams of Hypothetical Reasoning Diagnostic?” Ashley, K. and Lynch, C. (2010) in Stein, M.K., & Kucan, L. (Eds.) *Instructional Explanations in the Disciplines*. pp. 171-188 New York: Springer.

“Case-Based Reasoning”, Ashley, K. D. In A.R. Lodder & A. Oskamp (eds.): *Information Technology & Lawyers: Advanced technology in the legal domain, from challenges to daily routine*. pp. 27-68. Berlin: Springer Verlag, 2006.

“Hypo: A Precedent-Based Legal Reasoner”, Rissland, E.L. & Ashley, K.D., In Guy Vandenberghe, editor, *Recent Advances in Computer Science and Law*, Kluwer, 1989.

“Arguing by Analogy in Law: a Case-Based Model”. Ashley, K.D. In David H. Helman, editor, *Analogical Reasoning: Perspectives of Artificial Intelligence, Cognitive Science, and Philosophy*, Kluwer Academic Publishers: Dordrecht, The Netherlands. 1988.

“Toward Modeling Legal Argument”. Ashley, K.D. & Rissland, E.L. (1986). In Antonio A. Martino and F. Socci Natali, editors, *Automated Analysis of Legal Texts, Logic, Informatics, Law*, Elsevier (North-Holland).

“Reasoning by Analogy: A Survey of Selected A.I. Research with Implications for Legal Expert Systems”. Ashley, K. D. (1985). In Charles Walter, editor, *Computing Power and Legal Reasoning*, West Publishing Co., St. Paul, MN.

#### **Book Reviews:**

Review of *Conflict Resolution and its Context From the Analysis of Behavioural Patterns to Efficient Decision-Making* by Davide Carneiro, Paulo Novais, José Neves Springer, 2014. K. Ashley & J. Savelka, to appear in International Journal of Online Dispute Resolution.

Review of *EDI and American Law*. In *Journal of Law and Commerce*. Volume 9. Issue 2. Spring, 1990. University of Pittsburgh. Pittsburgh.

#### **Technical Reports (not published elsewhere):**

“Computational Argument as a Diagnostic Tool: The Role of Reliability”, Lynch, C. Ashley, K., Pinkwart, N., & Aleven, V., (2009). In Bench-Capon, T, Parsons, S. & Prakken H. (Eds.), *The Uses of Computational Argumentation: Papers from the AAI Fall Symposium*. Tech Report: FS-09-06 Menlo Park, California, AAI Press.

“Modeling Legal Argument: Reasoning with Cases and Hypotheticals -- a Thesis Proposal”. Ashley, K.D. (1986). Counselor Project Technical Memorandum # 10, Department of Computer and Information Science, University of Massachusetts, Amherst.

#### **Continuing Legal Education Materials:**

“Digital Rights Management Technology, Online Contracting, and the Digital Millennium Copyright Act: a

Tripartite Approach to Protecting Digital Content.” Ashley, K.D. and Seigworth, B. Chapter 10 of *Internet Law Update 2003*. pp. 239-269 Pennsylvania Bar Institute.

### **Tutorials and Seminars:**

Presented seminar entitled, “Research Progress in Artificial Intelligence and Law: an Intellectual Survey,” at the School of Law of the University of Bologna. December 5-7, 2016.

Presented seminar entitled, “Research Progress in Artificial Intelligence and Law: an Intellectual Survey,” at the School of Law of the University of Bologna. December 14-17, 2015.

Presented seminar entitled, “Research Progress in Artificial Intelligence and Law: an Intellectual Survey,” at the School of Law of the University of Bologna. December 1-4, 2014.

Presented seminar entitled, “Research Progress in Artificial Intelligence and Law: an Intellectual Survey,” at the School of Law of the University of Bologna. December 2-5, 2013.

Presented seminar entitled, “Research Progress in Artificial Intelligence and Law: an Intellectual Survey,” at the Faculty of Jurisprudence of the University of Bologna. December 10-13, 2012.

Co-delivered invited tutorial entitled, “An Introduction to Artificial Intelligence and Law,” with Matthias Grabmair at Jurix 2011: The 24th Annual Conference, Vienna, Austria, December 13, 2011.

Presented week-long seminar entitled, “Introduction to Artificial Intelligence and Law and Case-Based Legal Reasoning,” at the Faculty of Jurisprudence of the University of Bologna. May 10-14, 2010.

Co-delivered a tutorial entitled “Introduction to Artificial Intelligence and Law” with Tom Gordon at the Tenth International Conference on Artificial Intelligence & Law (ICAIL-05). Bologna. June, 2005.

Co-delivered a tutorial entitled “Introduction to Artificial Intelligence and Law” with C. Hafner at the Eighth International Conference on Artificial Intelligence & Law (ICAIL-01). St. Louis, MO. May, 2001.

Co-delivered a tutorial entitled “Introduction to Artificial Intelligence and Law” with C. Hafner at the Seventh International Conference on Artificial Intelligence and Law (ICAIL-99) Oslo, Norway. June, 1999.

Co-delivered a tutorial entitled “Introduction to Artificial Intelligence and Law” with C. Hafner at the Sixth International Conference on Artificial Intelligence and Law (ICAIL-97) Melbourne, Australia. July 1997.

Co-delivered a tutorial entitled “Case-Based Reasoning” with E. Simoudis at the Thirteenth National Conference on Artificial Intelligence (AAAI-96) in Portland, OR. August, 1996.

Co-delivered a tutorial entitled “Introduction to Artificial Intelligence and Law” with D. H. Berman at the Fifth International Conference on Artificial Intelligence and Law (ICAIL-95) College Park, MD. May 1995.

Co-delivered a tutorial entitled “Case-Based Reasoning Issues and Applications” with E. Simoudis at the 14th International Joint Conference on Artificial Intelligence (IJCAI-95) in Montreal, Quebec, Canada. August, 1995.

Delivered a tutorial entitled “Case-Based Reasoning and Its Implications for Legal Expert Systems” at the International Symposium on Legal Expert Systems, Meiji Gakuin University, Tokyo, Japan. March, 1995.

Co-delivered a tutorial entitled “Case-Based Reasoning” with E. Simoudis at the Eleventh National Conference on Artificial Intelligence (AAAI-93) in Washington, D.C. July, 1993.

Co-delivered a tutorial entitled “Case-Based Reasoning” with E. Simoudis and K. Sycara at the Thirteenth International Conference on Artificial Intelligence (IJCAI-93), Chambéry, France. August, 1993.

Co-delivered a tutorial entitled “Introduction to Artificial Intelligence and Law” with D. H. Berman at the Fourth International Conference on Artificial Intelligence and Law (ICAIL-93) Amsterdam. June 1993.

Co-delivered a tutorial entitled “Case-Based Reasoning” with E. Simoudis at the Tenth National Conference on Artificial Intelligence (AAAI-92), San Jose, CA, July, 1992. This tutorial had the largest attendance of any tutorial at AAAI-92.

Co-delivered with K. Sycara tutorials entitled “Case-Based Reasoning” at the Twelfth International Joint Conference on Artificial Intelligence (IJCAI-91), August, 1991, Sydney, Australia and at the Ninth National Conference on Artificial Intelligence (AAAI-91), Anaheim, CA, July, 1991.

Delivered tutorials entitled “Case-Based Reasoning” at the Third International Conference on Artificial Intelligence and Law (ICAIL-91), Oxford, U.K., June, 1991 and at the Second International Conference on Artificial Intelligence and Law (ICAIL-89), Vancouver, B.C., June, 1989.

Delivered tutorial entitled “Case-Based Reasoning” at the IEEE conference on Artificial Intelligence Applications, Santa Barbara, CA, March, 1990.

#### **Invited Talks and Panel Discussions:**

Invited presentation for Jurix 2016 Workshop on Legal Data Analysis in a panel discussion entitled, “How should law be communicated and analyzed on the example of international law?” entitled, “Some examples involving public health law of multiple states”. December 14, Inria Sophia Antipolis Méditerranée, Antibes, France.

Invited presentation entitled, “Harnessing Argument Mining for Conceptual Legal Information Retrieval” for the Annual Conference of the Cyberjustice Laboratory, Université de Montréal, entitled “On Recent Developments in Artificial Intelligence: Law and Justice,” in a panel called “New Developments in Cyberjustice and Law: Computational Law,” October 27, 2016.

Delivered invited talk entitled, “Putting Argument Mining to Work: An Experiment in Legal Argument Retrieval using the LUIMA Type System And Pipeline”, at the SubTech 2016 Conference at the University of Richmond School of Law, July, 2016.

Delivered invited presentation entitled, “Legal Argument Retrieval Using LUIMA” at the Vanderbilt University Law School AI & Law Workshop Program on Law & Innovation. April, 2016. Nashville, TN.

Delivered presentation entitled “Putting Argument Mining to Work: an Experiment in Legal Argument Retrieval Using the LUIMA Type System and Pipeline”. K. Ashley (2016) Dagstuhl Seminar 16161–Natural Language Argumentation: Mining, Processing, and Reasoning over Textual Arguments. April.

Delivered paper entitled “A Global Perspective on Argument Diagramming to Support Writing Skills”, K. Ashley, M. Falakmasir (2015) 7th International Conference on Education and New Learning Technologies, *EDULEARN15 Proceedings*, pp. 7354-7363. Barcelona, July.

Delivered paper entitled “Applying an Interactive Machine Learning Approach to Statutory Analysis” Savelka, J., Trivedi, G., & Ashley, K. in A. Rotolo (Ed.) *Proceedings, 28th Annual Conference on Legal Knowledge and Information Systems (Jurix 2015)*. **Best Student Paper Award**. Universidade do Minho, Portugal.

Delivered position paper entitled, “Applying Argument Extraction to Improve Legal Information Retrieval” at the Frontiers and Connections between Argumentation Theory and Natural Language Processing Conference, Centro Residenziale Universitario di Bertinoro, Italy, July 2014.

Delivered invited talk entitled, “Toward Integrating Computational Models and Legal Texts (or will IBM Debater beat us to it?)”, at the Thirteenth International Conference on Substantive Technology in the Law School and Law Practice (Subtech 2014), University of Vienna Law School, July 11, 2014.

Co-delivered invited talk entitled, “Computer-Supported Peer Review in a Law School Context” at the Conference for Law School Computing (CALIcon 2014), Harvard Law School, June, 2014.

Delivered invited talk entitled, “A Global Perspective on Argument Diagramming to Support Writing Skills”. Presented at: Board of Visitors Meeting; 2014 Apr 25; Learning Research and Development Center.

Co-delivered invited talk entitled, “Modeling Purposive Legal Argumentation as a Comparison of Value Effects Entailed by Situations,” at the University of San Diego Center for Computation, Mathematics, and the Law (CCML) Inaugural Workshop. March 2014.

Delivered invited talks entitled, "Toward Integrating Computational Models and Legal Texts," at Stanford Law School as part of the CodeX Speaker Series, sponsored by the Stanford CodeX: Center for Legal Informatics. February 2014.

Delivered paper entitled, “From Information Retrieval (IR) to Argument Retrieval (AR) for Legal Cases: Report on a Baseline Study,” at the 26th Annual Conference on Legal Knowledge and Information Systems (Jurix 2013) Bologna. December, 2013.

Delivered paper entitled, “Network Analysis of Manually-Encoded State Laws and Prospects for Automation,” at Workshop on Network Analysis in Law at the XIV International Conference on AI and Law (ICAIL 2013) Rome, June 14, 2013.

Delivered research abstract entitled, “Toward Constructing Evidence-Based Legal Arguments Using Legal Decision Documents and Machine Learning,” at the Fourteenth International Conference on Artificial Intelligence and Law. ICAIL 2013. June. Rome, Italy.

Co-delivered invited talk entitled, “Text Classification and Machine Learning” at the MIDAS Workshop on Engaging Computational Methods for Public Health Law, October, 2013, Pittsburgh.

Delivered paper entitled, “Comparing Argument Diagrams” at the 25th Annual Conference on Legal Knowledge and Information Systems (Jurix 2012) December, 2012, Amsterdam.

Delivered short presentation entitled, “Toward AI-enhanced Computer-supported Peer Review in Legal Education” at The Twelfth International Conference on Substantive Technology in Legal Education (Subtech 2012), July 26-28, 2012, New York Law School.

Presented short talk as invited participant at “Toward Automated Compliance Monitoring Workshop” of IARPA at the University of Maryland, May 30, 2012.

Delivered invited talks entitled, “Toward Teaching Writing and Argumentation with AI-Supported Peer Review” at the: Center for e-Learning Technology (CeLTech) Saarland University and German Research Center for Artificial Intelligence (DFKI) Saarbrücken, Germany, May 9, 2012; Karlsruhe Institute of Technology (KIT) Institute of Philosophy, Karlsruhe, Germany, May 3, 2012; Clausthal University of Technology, Department of Informatics, Clausthal-Zellerfeld, Germany, April 24, 2012.

Delivered talk entitled, "Toward AI-enhanced Computer-supported Peer Review in Legal Education" at Jurix 2011: The 24th Annual Conference, Vienna, Austria, December 16, 2011.

Delivered invited talks entitled, "Toward Extracting Information from Public Health Statutes using Text Classification and Machine Learning" and "Toward AI-enhanced Computer-supported Peer Review in Legal Education" at the Artificial Intelligence and Law Workshops: Envisaging New Frontiers, Centro Interdipartimentale di Ricerca in Storia del Diritto, Filosofia e Sociologia del Diritto e Informatica Giuridica, University of Bologna, November 16, 28, 2011.

Delivered series of four invited lectures entitled, "Research Progress in Artificial Intelligence and Law: an Intellectual Survey", at the University of Bologna Faculty of Law, October 12, 19 and November 2, 9, 2011.

Delivered invited lecture entitled, "The Roles of Intermediate Legal Concepts and Computational Approaches to Modeling Them", for Prof. Antonino Rotolo's course entitled, Philosophy of Law, November 14, 2011.

Delivered invited talks entitled, "Applying Artificial Intelligence to Law: Lessons Learned and Future Directions", at the: Institute of Advanced Studies, University of Bologna, November 15, 2011; Istituto di Teoria e Tecniche dell'Informazione Giuridica Consiglio Nazionale delle Ricerche (ITTIG-CNR) Florence, Italy, October 24, 2011; Masaryk University Faculty of Law, Brno, Czech Republic, October 6, 2011.

Presented talk entitled, "Legal Applications and IBM's Watson/DeepQA" at University of Pittsburgh Watson Symposium, March 29, 2011. University Club.

Co-presented talk at LRDC entitled "Improving Learning from Peer Review with NLP and ITS Techniques (July 2009-June 2011). March 20, 2011 (with Diane Litman).

Delivered invited talk entitled, "Challenges at the Intersection of Semantic Computing with Law, Legal Reasoning, and Legal Practice," at the Fourth IEEE International Conference on Semantic Computing (ICSC2010), Pittsburgh. September, 2010.

Delivered invited talk entitled, "An Approach to Ontologies for Case-Based Legal Reasoning," at the Institute of Legal Information Theory and Techniques of the National Research Council (ITTIG-CNR), Firenze, Italy. May 17, 2010.

Delivered invited research abstract entitled, "Toward Modeling Analogical, Teleological and Hypothetical Legal Reasoning in a Case Microworld," to Workshop on Modeling Legal Cases at 12th International Conference on AI and Law". Barcelona. June, 2009.

Invited discussant at working session to discuss Richard Susskind's *The End of Lawyers? Rethinking the Nature of Legal Services* at the Berkman Center for Internet and Society's Law Lab, Harvard University. April 22, 2009.

Delivered invited talk entitled, "Connecting Hypothesis-testing to Legal Texts," to the University of Pittsburgh School of Medicine Department of Biomedical Informatics Natural Language Processing Group. April 8, 2009.

Delivered invited short talk entitled, "Computational Thinking for Lawyers," at a panel on Computational Thinking Everywhere for an NSF-sponsored workshop entitled "Computational Thinking for Everyone" at the Keck Center of the National Academies in Washington, D.C. February 19, 2009.

Delivered invited talk entitled, "Teaching Argumentation with Computers: One step back, two steps forward?" at Jurix 2008: 21st Annual Conference, ITTIG-CNR, European University Institute, Florence, Italy, December, 2008.

Delivered invited talk to the Workshop on Approaches to Legal Ontologies entitled, "An Approach to Legal Ontologies: the Case-Based Reasoning Perspective," European University Institute. Florence, Italy, December 9, 2008.

Delivered invited talk entitled, "A Process Model of Legal Argument with Hypotheticals." at Jurix 2008: 21st Annual Conference, ITTIG-CNR, European University Institute, Florence, Italy, December, 2008.

Delivered invited talk entitled, "Twists and Turns in Teaching Argumentation with Computers", at the Twenty-Third AAAI Conference on Artificial Intelligence, Workshop on What Went Wrong and Why: Lessons from AI Research and Applications. Chicago. July 13, 2008,

Delivered invited talk entitled, "LARGO, an ITS for Teaching Argumentation with Hypotheticals", Stage Setting Talk at Sub Tech 2008, William and Mary Law School, Williamsburg, VA July 24, 2008.

Delivered invited talk entitled, "Some Thoughts on Using Computers to Teach Argumentation," at The 21st International FLAIRS Conference, Special Track on Intelligent Tutoring Systems, Coconut Grove, Florida, USA. May, 2008.

Delivered invited talk entitled, "Are Students' Argument Diagrams of Hypothetical Reasoning Diagnostic?" Ashley, K. (May 9, 2008) Invited Talk at "Instructional Explanations in the Disciplines: Talk, Texts, and Technology: A Conference in Honor of Gaea Leinhardt" Learning Research and Development Center University of Pittsburgh.

Delivered invited talk entitled, "The Intersection between Artificial Intelligence and Law: an Introduction to AI & Law" at the Carnegie Mellon University chapter of The Triple Helix. (February, 2008).

Invited panelist in a conference at Cardozo Law School in Manhattan entitled, "Graphic and Visual Representations of Evidence and Inference in Legal Settings", commenting on a paper entitled, "Graphical Manipulation of Evidence in Structured Arguments," by John Lawrence of SRI International's Artificial Intelligence Center, Menlo Park, California. (January, 2007)

Delivered paper entitled "Learning by Diagramming Supreme Court Oral Arguments", Ashley, K., (June 7, 2007) to the 11th International Conference on Artificial Intelligence and Law (ICAIL-07).

Delivered short talk entitled "Can AI & Law Contribute to Managing Electronically Stored Information in Discovery Proceedings? Some Points of Tangency." Ashley, K. (June 4, 2007) at DESI Workshop: Supporting Search and Sensemaking for Electronically Stored Information in Discovery Proceedings.

Co-delivered a talk entitled "Hypothesis formation and testing in an interpretive domain" at a Carnegie Mellon University meeting of the NSF ITR SCOTUS project. (December, 2006).

Delivered invited talk entitled "Teaching Case Analysis through Framing: Prospects for an ITS in an ill-defined domain," ITS 2006 Workshop on "Intelligent Tutoring Systems for Ill-Defined Domains" Jhongli, Taiwan. June 2006.

Delivered invited talk entitled "Hypothesis Formation and Testing in an Interpretive Domain" Ashley, K. D. Cognitive Brown Bag Talk to Cognitive Science faculty and graduate students, Learning Research and Development Center. November 9, 2005.

Delivered invited talk entitled "Hypothesis Formation and Testing in an Interpretive Domain" Ashley, K.D. ISP Forum talk to Graduate Program in Intelligent Systems faculty and graduate students. December 2, 2005.

Delivered invited talks entitled "International Conference on Case-Based Reasoning 2003: Highlights –



Overview and Distinguished Paper Awards” at the Twentieth National Conference on Artificial Intelligence, Pittsburgh. July, 2005.

Delivered invited talk entitled “Teaching Creative Legal Reasoning with Examples from Supreme Court Oral Arguments” at the ICAIL-05 Workshop on Artificial Intelligence and Legal Education. Bologna. June, 2005.

Delivered invited talk entitled “Generating Legal Arguments and Predictions from Case Texts,” at the Tenth International Conference of AI and Law. Bologna. June, 2005.

Delivered invited talk entitled “Applying Scientific Hypothesis Testing to Predict Case Outcomes: The Predictive Role of Legal Concepts.” Lehigh University Department of Computer Science and Engineering. April, 2004.

Delivered invited talk entitled “Case-Based Models of Legal Reasoning in a Civil Law Context” at the International Congress of Comparative Cultures and Legal Systems of the Instituto de Investigaciones Jurídicas, Universidad Nacional Autónoma de México, Mexico City. February, 2004.

Delivered invited talk entitled “Do Case-Based Models of Legal Reasoning Fit in a Civil Law Context?” at the Workshop on CBR, University of Maastricht, the Netherlands. November, 2003.

Delivered invited talk entitled “Applying Scientific Hypothesis Testing to Predict Case Outcomes: The Predictive Role of Legal Concepts” at the Catholic University of Leuven, Belgium. November, 2003.

Delivered invited talk entitled “Exploring an Example of Creative Legal Problem Solving: Inventing the NOW Account,” at the Special Workshop of the IVR World Congress 2003 on Creativity in Legal Problem Solving. Lund, Sweden. August, 2003.

Delivered invited talk entitled “Toward a Computerized Case-Based Legal Assistant” at the University of Saint Catherine, Florianopolis, Brazil. August, 2003.

Delivered invited talk entitled “Teaching Case-Based Argumentation Concepts Using Dialectical Argument vs. Didactic Explanations,” to the Board of Visitors of the University of Pittsburgh LRDC/CMU CIRCLE Project and to the Intelligent Systems Forum. March, 2002,

Co-delivered invited talk entitled, “Bridging the Gap Between Abstract Rules and Specific Facts: A Case-Based Approach” to the Board of Ethical Review of the National Society of Professional Engineers in Alexandria, VA. October, 2001.

Delivered invited talk entitled “Opportunities and Prospects for Intelligent Tutoring in Legal Education” at the Eighth International Conference on Artificial Intelligence & Law (ICAIL-01). St. Louis, MO. May, 2001.

Delivered invited talk entitled “Using Textual CBR For Case Authoring Support” at the Fourth International Conference on Case-Based Reasoning. (ICCB-01). Vancouver, BC. July, 2001.

Delivered invited talk entitled “Computational Models of Case-Based Legal Reasoning and Their Uses”. Ashley, K.D. (2001) University of Bologna. April.

Delivered invited talks entitled “Teaching Argumentation Concepts Using Dialectical Arguments vs. Didactic Explanations”. Ashley, K.D. (2001). To CIRCLE Board of Visitors and Intelligent Systems Program Forum. February.

Delivered invited talk entitled “Computational Models of Legal Reasoning and Their Uses”. Ashley, K.D. (2000). University of Chicago Law School Roundtable. November.

Delivered invited talk entitled "Law School Education and Information Technology". Ashley, K.D. (2000). 25th Annual Meeting of The Law and Computers Association of Japan. November.

Co-delivered invited talk entitled "Modeling Learning to Reason with Cases in Engineering Ethics: A Test Domain for Intelligent Assistance" at Carnegie Mellon University Department of Philosophy Colloquium. September, 2000.

Delivered invited talk entitled "Applying Textual Case-Based Reasoning and Information Extraction in Lessons Learned Systems". Ashley, K. D. AAAI Workshop on Intelligent Lessons Learned Systems. Austin. August, 2000.

Delivered invited short talk entitled "Connecting: (1) Open/Closed Source Code, (2) Regulability, and (3) Making Legal Rules Explicit in AI & Law". Sixth International Conference on Substantive Technology in Law School and Law Practice (SubTech 2000). Harvard Law School. July.

Delivered invited talk entitled "Toward Automatically Indexing Textual Cases for an Intelligent Tutoring System". Ashley, K.D. (2000). To LRDC Board of Visitors. January.

Delivered invited talk entitled "Progress in Textual Case-Based Reasoning". Ashley, K.D. (1999). Navy Center for Applied Research in Artificial Intelligence 1999 Seminar Series. Naval Research Laboratory. October.

Delivered invited talk entitled "Progress in Text-Based Case-Based Reasoning". Ashley, K.D. (1999). Third International Conference on Case-Based Reasoning. Seon, Germany. [http://www.lrdc.pitt.edu/Ashley/TalkOverheads/\\_files/v3/\\_document.htm](http://www.lrdc.pitt.edu/Ashley/TalkOverheads/_files/v3/_document.htm)

Delivered invited talks entitled "On Teaching Cyclists to Watch Out for Balloons". Ashley, K.D. (1998). To Learning Research and Development Center and LRDC Board of Visitors. September and October.

Delivered invited talk entitled "Adding an Intelligent Tutor to an Electronic Legal Casebook". Ashley, K.D. (1998). Fifth International Conference on Substantive Technology in Law School and Law Practice, Stockholm, July.

Co-delivered invited talk entitled "Reasoning Symbolically About Partially Matched Cases". Ashley, K.D. and Aleven, V. (1997). At the Fifteenth International Joint Conference on Artificial Intelligence (IJCAI-97), Nagoya, Japan. August.

Delivered invited talk entitled "Evaluating a case argument tutoring program with a first year legal writing section" at the 4th International Conference on Substantive Technology in the Law School and Law Practice University of Montreal. July, 1996.

Co-delivered invited talk entitled "An Empirical Evaluation of a Case Argument Tutorial Program" at the First Carnegie Mellon University Symposium on Technology Enhanced Learning. Pittsburgh, PA. May, 1996.

Delivered invited talk entitled "Does CBR Adaptation Really Work?" at the 1995 AAAI Fall Symposium on Adaptation of Knowledge for Reuse. Cambridge, MA. November.

Delivered invited talk entitled "Reasoning with Reasons in Case-Based Comparisons" at the First International Conference on Case-Based Reasoning (ICCB-95) Sesimbra, Portugal. October, 1995.

Delivered invited talk entitled "A Report on the CATO Program" to West Publishing Company Research Department, Eagan, MN. September, 1995.

Co-delivered invited talk entitled “Doing Things with Factors” at the Fifth International Conference on Artificial Intelligence and Law College Park, MD. May, 1995.

Co-delivered invited talk entitled “Representing Methods of Legal Analysis Imposed by Treaties and Statutes” at The Third International Workshop on a Legal Expert System for the CISG, College Park, MD. May 1995.

Co-delivered invited talk entitled “Context Sensitive Case Comparisons in Practical Ethics: Reasoning About Reasons” at the Fifth International Conference on Artificial Intelligence and Law College Park, MD. May, 1995.

Delivered an invited talk entitled “Teaching Law Students to Reason with Cases: the CATO Program” at the International Symposium on Legal Expert Systems, Meiji Gakuin University, Tokyo, Japan. March, 1995.

Invited to conduct breakout session entitled “Problems and Progress in Artificial Intelligence (AI) Models of Case-Based Legal Reasoning” at American Association of Law Schools (AALS) Mini-Workshop on Uses of Technology in Research and Teaching, New Orleans. January, 1995.

Delivered invited talk entitled “A CBR Knowledge Representation for a Practical Ethics Domain: Toward Modeling Medical Ethical Reasoning” at the University of Chicago Department of Computer Science. December, 1994.

Delivered invited talk entitled “A CBR Knowledge Representation for Practical Ethics” at the Second European Workshop on Case-Based Reasoning (EWCBR-94), Chantilly, France. November, 1994.

Co-delivered invited talk entitled “An Instructional Environment for Practicing Argumentation Skills” at the Twelfth National Conference on Artificial Intelligence (AAAI-94). Seattle, WA. July, 1994.

Delivered invited talk entitled “Evaluating Comparative Evaluation Models” at the AAAI-94 Workshop on Case-Based Reasoning . Seattle, WA. July, 1994.

Delivered invited talk entitled “Knowledge Representation for Ethics Case Comparison and Some Ramifications for Legal Knowledge Representation” Japanese ICOT Workshop on AI and Law. Boston. March, 1994.

Delivered invited talk entitled “Using Student Questions in a Case Argument Tutorial System (CATO)” and showed video of CATO program at the American Association of Law Schools 1994 Annual Meeting for the Section on Teaching Law Outside of Law Schools. Orlando, FL. January, 1994.

Delivered invited talk entitled “An Artificial Intelligence Model of Arguing with Cases” and showed video of CATO program to the Legal Theory Workshop of the University of Chicago Law School. November, 1993.

Delivered talk entitled “Using Logic to Reason with Cases” at the First European Workshop on Case-Based Reasoning (EWCBR-93), Kaiserslautern Germany. November, 1993.

Delivered talk entitled “Toward Intelligent Tutoring with Cases in Law and Practical Ethics” to the University of Pittsburgh Graduate Program in Intelligent Systems Seminar Series. November, 1993.

Co-delivered talk entitled “What Law Students Need to Know to WIN” at the Fourth International Conference on Artificial Intelligence and Law, Amsterdam. June, 1993.

Delivered invited presentation entitled “Reasoning with Cases in AI, Law and Ethics” to an audience of sixty computer science students and legal scholars at the Department of Mathematics and Computer Science, Computer Law Institute, Vrije University, Amsterdam, The Netherlands. November, 1992.

Delivered invited talk entitled “Reasoning with Cases in AI, Law and Ethics” for the University of Pittsburgh Intelligent Systems Program R&D Seminar series. October, 1992.

Delivered invited talk entitled “Generating Dialectical Examples Automatically” at the Second International Conference on Substantive Technology in the Law School, Chicago-Kent College of Law, July, 1992.

Co-delivered talk entitled “Generating Dialectical Examples Automatically” at the Tenth National Conference on Artificial Intelligence (AAAI-92) San Jose, CA. July, 1992.

Co-delivered talk entitled “Automated Generation of Examples for a Tutorial in Case-Based Argumentation” at the Second International Conference on Intelligent Tutoring Systems (ITS-92) Montreal. June, 1992.

Delivered invited talk entitled “Reasoning with Cases in AI and Law” at the Washington University of St. Louis Computer Science Department / SIGART Seminar. May, 1992.

Delivered invited talk entitled “Reasoning with Cases in AI and Law” at the Washington University of St. Louis School of Law. May, 1992.

Delivered invited talk entitled “Toward a Socratic Tutoring System for Teaching Law Students to Argue with Cases” to Board of Trustees of the National Center for Automated Information Retrieval (NCAIR). Washington, D.C. May, 1992.

Co-delivered talk entitled “Toward an Intelligent Tutoring System for Teaching Law Students to Argue with Cases” at the Third International Conference on AI and Law (ICAIL-91), Oxford, UK. June, 1991.

Participated in panel discussion entitled “Cases and Rules” at the Third International Conference on AI and Law (ICAIL-91), Oxford, UK. June, 1991.

Co-delivered talk entitled “A Computational Approach to Explaining Case-Based Concepts of Relevance in a Tutorial Context” at the Defense Advanced Research Projects Agency (DARPA) Case-Based Reasoning Workshop, Washington, DC. May, 1991.

Presented an invited talk entitled “Reasoning with Cases and Hypotheticals in HYPO” to the Cognitive Science Society, Princeton University in April, 1991.

Delivered talk entitled “Toward an Intelligent Case-Based Tutorial Program for Teaching Students to Argue with Cases” and participated as a panelist at the Stanford Spring Symposium on Argumentation and Belief at Stanford University in March, 1991.

Panelist at AAAI-90 Workshop on Artificial Intelligence and Legal Reasoning, Boston, August, 1990.

Panelist at AAAI Spring Symposium on Case-Based Reasoning, Stanford University, Palo Alto, CA, March, 1990.

Delivered talk entitled “Defining Salience in Case-Based Arguments” at IJCAI-89, Detroit, MI, August, 1989.

Delivered talk entitled “Toward a Computational Theory of Arguing with Precedents: Accommodating Multiple Interpretations of Cases” at the Second International Conference on Artificial Intelligence and Law, Vancouver, B.C., June, 1989.

Kevin D. Ashley. January, 2018.

29

Participated in panel discussion on “Similarity Metrics” at DARPA Case-Based Reasoning Workshop, Pensacola Beach, FL, May, 1989.

Delivered talk entitled “Waiting on Weighting: A Symbolic Least Commitment Approach” at AAAI-88, St. Paul, MN, August, 1988.

Delivered talk entitled “Reasoning Adversarially with Cases and Factors” at AAAI Workshop on Case-Based Reasoning, AAAI-88, St. Paul, MN, August, 1988.

Delivered talk entitled “AI Models of Legal Reasoning; A Case-Based Approach” at Boston Bar Association Computer Law Committee, Boston, MA, May, 1988.

Delivered talk entitled “Case-Based Reasoning about Competing Factors in Hypo” at DARPA Case-Based Reasoning Workshop, Clearwater Beach, Fla., May, 1988.

Delivered talk entitled “Hypo: an Adversarial Case-Based Reasoning System” at IBM Thomas J. Watson Research Center, Yorktown Heights, NY, April, 1988.

Delivered guest lecture entitled “Hypo: an Adversarial Case-Based Reasoning System” at Stanford Law School seminar on Building Legal Expert Systems, Palo Alto, CA, April, 1988.

Delivered talk entitled “Dynamic Assessment of Relevancy in a Case-Based Reasoner” at Fourth IEEE Conference on Artificial Intelligence Applications, San Diego, March, 1988.

Delivered faculty colloquium entitled “Arguing by Analogy in Law: an Artificial Intelligence Model” at Boston University Law School, February, 1988, Boston, MA.

Delivered seminar entitled “Protecting and Exploiting Software Development: Copyrights, Contracts and Licensing” at Boston University Law School, Center for Law and Technology, February, 1988, Boston, MA.

Presented demonstration of Hypo program at Conference on New Technologies for the Codification, Storage, Retrieval and Analysis of International Events Data co-sponsored by Data Developments in International Relations, University of Illinois at Champaign-Urbana, and Center for International Studies, Massachusetts Institute of Technology, November, 1987, Cambridge, MA.

Delivered talk entitled “Compare and Contrast, A Test of Expertise” at AAAI, Seattle, WA. July, 1987.

Delivered talk entitled “Distinguishing - A Reasoner's Wedge” at Ninth Annual Conference of the Cognitive Science Society, Seattle, WA. July, 1987.

Delivered talk entitled “Hypo: A Case-Based Reasoning System” at Theoretical Issues in Conceptual Information Processing, Washington, D.C., June, 1987.

Participated in panel discussion of “Contract and Tort Liability of Expert Systems” and delivered talk entitled “Allocating the Risks of Relying on Expert Systems” at the Symposium on Expert Systems sponsored by the Center for Law and Technology, Boston University, School of Law, May, 1987.

Co-delivered talk entitled “A Case-Based System for Trade Secrets Law & But, See, Accord: Generating *Blue Book* Citations in Hypo,” at First International Conference on Artificial Intelligence and Law, Northeastern University, Boston. May, 1987.

Delivered seminars entitled “Applying Relevant Precedents in a Case-Based Reasoning System,” April - May, 1987 at computer science departments of: Massachusetts Institute of Technology, Carnegie Mellon University, University of California at Berkeley, Harvard University, University of Texas, University of Pennsylvania, Columbia University, University of Southern California.

Co-delivered talk entitled “Hypo: Reasoning with Cases in a Legal Domain” at DARPA Conference on Case-Based Reasoning, Atlanta, Georgia. December, 1986.

Co-delivered talk entitled “Hypotheticals as Heuristic Device” at AAAI, Philadelphia. August, 1986.

Delivered talk entitled “Knowing What to Ask Next and Why: Asking Pertinent Questions Using Cases and Hypotheticals” at Eighth Annual Conference of the Cognitive Science Society, Amherst, MA. August, 1986.

Delivered seminar required for thesis entitled “Modelling Legal Argument: Reasoning with Cases and Hypotheticals -- A Thesis Proposal”. University of Massachusetts, Computer and Information Science Department, Amherst. December, 1985.

Delivered talk entitled “Toward Modelling Legal Argument” at Second International Congress, Logica, Informatica, Diritto, Automated Analysis of Legal Texts, Consiglio Nazionale delle Ricerche, Istituto per la documentazione giuridica, Florence, Italy. September, 1985.

Participated as panelist in discussion entitled “AI and Legal Reasoning” with L. Thorne McCarty, Anne Gardner, Donald Waterman, Michael Dyer and Edwina Rissland, Chairman, at IJCAI. Los Angeles, CA. August, 1985. See Report of Panel in *Proceedings IJCAI-85*, p. 1254.

Delivered talk entitled “The Counselor Project” at Second Annual Workshop on Theoretical Issues in Conceptual Information Processing, Yale University, New Haven, CT. May, 1985.

Delivered talk entitled “Reasoning by Analogy: A Survey of Selected A.I. Research with Implications for Legal Expert Systems” at University of Houston Conference on Law and Technology, Houston, Tex. August, 1984.

**Major Professional Service Positions:**

Program Chairperson, 26<sup>th</sup> Annual Conference of Legal Knowledge and Information Systems (Jurix 2013) Bologna, Italy.

Conference Chairperson, 13<sup>th</sup> International Conference on Artificial Intelligence and Law. University of Pittsburgh School of Law. 2011.

Senior Program Committee, Intelligent Tutoring Systems 2012

Program Committee, Applying Human Language Technology to the Law

Senior Program Committee Member, Artificial Intelligence in Education 2013, 2011  
Program Committee, Fourth International Conference on Computational Models of Argument

Guest Editor, *Artificial Intelligence and Law*, Special Issue on e-Discovery. 2009-2010.

Guest Editor, *International Journal of Artificial Intelligence in Education* Special Issue on Ill-defined domains. 2007-2008.

Co-organizer, Discovery of Electronically Stored Information (DESI III) Workshop on Global E-Discovery/E-Disclosure at 12th International Conference on Artificial Intelligence and Law 2009, Barcelona, June.

Invited participant, Dagstuhl Perspectives Workshop entitled “Theory and Practice of Argumentation Systems” and, in particular, in a group focusing on “Argumentation and Decision Support in Application Areas.” February, 2008.

Program Committee Co-chairperson. 8<sup>th</sup> International Conference on Intelligent Tutoring Systems. ITS 2006. Jhongli, Taiwan. June 2006.

Co-chairperson, Program Committee: International Conference on Case-Based Reasoning, Trondheim, Norway. 2003.

Guest Editor, *Artificial Intelligence Journal* Special Issue on Artificial Intelligence and Law. 2001-2003.

Co-Editor-in-Chief, *Artificial Intelligence and Law*, a journal published by Springer Publishers, Dordrecht, The Netherlands. 1999 to present. Member, Editorial Board, 1992 to present.

President, International Association for Artificial Intelligence and Law, 2000-2001. Vice President, 1997-1999. Member, Nominations Committee, 1993-1997.

Co-chair of The AAI-98 Workshop on Textual Case-Based Reasoning. Madison, WI. July, 1998.

Chairman, Program Committee, Fourth International Conference on Artificial Intelligence and Law, Amsterdam, The Netherlands. June, 1993.

Program Chairperson for The Fourth International Workshop on Legal Expert Systems for the UN Convention on Contracts for the International Sale of Goods (CISG). Melbourne, Australia. June, 1997.

Program Committee member and Area Chairperson for Knowledge-Based Systems, Tenth National Conference on Artificial Intelligence (AAAI-92), San Jose, CA, 1992.

Program Chairperson of The Third International Workshop on a Legal Expert Systems for the CISG, College Park, MD. May 1995.

Program Committee member / reviewer for:

National Conference on Artificial Intelligence 2014, 2008, 2007, 2006, 1996, 1994, 1992, 1991, 1990.  
International Joint Conference on Artificial Intelligence, 2009, 2005, 1997, 1991  
International Conference on Case-Based Reasoning, 2013, 2011, 2009, 2007, 2005, 2003. 2001, 1999, 1997, 1995.  
International Conference on Artificial Intelligence and Law. 2013, 2011, 2009, 2007, 2005, 2003, 2001, 1999, 1997, 1995, 1993, 1989.  
European Conference on Case-Based Reasoning, 2008, 2000, 1998, 1996, 1994.  
AAAI Workshop on Case-Based Reasoning, 1988.  
Annual Conference of the Cognitive Science Society, 2005, 2004.  
International Workshop on Juris-informatics (JURISIN) 2007, 2008, 2009.  
International Conference on Legal Knowledge and Information Systems (Jurix) 2007, 2008, 2009, 2010, 2011.

**Other Professional Service:**

Panelist, National Science Foundation, 2011.

Panelist, National Science Foundation Artificial Intelligence & Cognitive Science CAREER Award Panel, 2004.

Panelist, National Science Foundation Graduate Research Fellowship Evaluations. February, 1997--1998.

Reviewer for United States National Science Foundation, Hong Kong Research Grants Council, Netherlands Organization for Scientific Research, Social Sciences and Humanities Research Council of Canada.

Kevin D. Ashley. January, 2018.

32

Participant, NSF Information and Data Management Workshop in Chicago, March 1999; Washington D.C. March, 1998.

Reviewed journal article submissions for *AI Review*, *Cognitive Science*, *Journal of the Learning Sciences*, *Transactions on Systems, Man, and Cybernetics*, *Artificial Intelligence and Law*, *International Journal of Man/Machine Studies*, *Jurimetrics*.

Brief grader for the Frederick Douglass Moot Court Competition. 2016-2017.

**University Service:**

Member, Provost's Area Planning and Budget Committee, University of Pittsburgh, 2013-2014.

Member, Provost Search Committee, University of Pittsburgh, 2009-2010.

Member, Director Search Committee, Learning Research and Development Center, University of Pittsburgh, 2007-2008.

Member, Dean Search Committee, University of Pittsburgh School of Law. 2004-2005.

Member, Provost's Ad Hoc Committee on University Copyright Policy, 2000-2001.

Member, University Research Council, 1999-2001

Member, Senate Computer Usage Committee, University of Pittsburgh. Pro Tem, 1990--1992. Elected, 1992--2000.

Member, Taskforce on Intellectual Property Rights in an Electronic Environment, 1994.

Member, COIC Oversight Committee for Psychology Software Tools, Inc. 2008-present.

Member, Planning Committee, MIDAS Workshop on Engaging Computational Methods for Public Health Law, University of Pittsburgh School of Public Health. 2013.

**Committee Memberships at the University of Pittsburgh School of Law:**

Committee on Petitions and Academic Standards, 2014-2015, Chairperson; 2015-2016; 2016-2017, Chairperson.

Committee on Assessment of Student Learning Outcomes, 2008-2011, 2012-2013, Chairperson

Planning and Budget Committee, 2009-2011, 2012-2014, Chairperson

Ad Hoc Committee on Curriculum, 2007-2008, Co-chairperson

Ad Hoc Committee on International Law Center, 1993-1994.

Admissions 1998-1999.

Budget and Finance Committee 2000-2002.

Clinical 1992--1993,

Colloquia 1991--1992,

Curriculum 1990-1991, 1999-2000, (Chair) 2000-2001, 2001-2002.

Library and Technology 1989--1990, 1993-1994, (Chair) 1999-2000; (Chair) 2003-2004; 2004-2005

Committee Memberships at the University of Pittsburgh Intelligent Systems Program:

Admissions 1990--1995, 1999.

**Committee Memberships at the University of Pittsburgh Learning Research and Development Center:**

Chairperson, LRDC Executive Committee, 2014-2017.

LRDC Committee on the Institute for Learning 2013-2014.

Computer Services Committee 2003-2005, 2005-2006.



Executive Committee 1999-2001; 2003-2004, 2004-2005, 2008-2009, 2009-2010, 2010-2011, 2012-2013, 2013-2014.

Strategic Planning Committee 2006-2007, 2008-2009.

**Professional Societies:**

International Association for Artificial Intelligence and Law

American Association for Artificial Intelligence

American Bar Association

Admitted to the Bar in New York, Massachusetts and Pennsylvania

**Student Supervision:**

Referee for Ph.D. candidate Michael Curtotti, Australian National University, Canberra, Australia, "Enhancing the Communication of Law: a cross-disciplinary investigation applying information technology." (F2016)

Referee for Ph.D. candidate Bram Roth, University of Maastricht School of Law, Maastricht, The Netherlands, "Case-Based Reasoning in the Law: A Formal Theory of Reasoning by Case Comparison." (F2004)

Referee for Ph.D candidate Andrew Stranieri, Computer Science and Computer Engineering Department, La Trobe University, Bundoora, Victoria, Australia, "Automating Legal Reasoning in Discretionary Domains". (S1998)

Referee for Ph.D candidate James Popple, Computer Science & Technology Program, The Australian National University, Canberra, Australia, "Shyster: A Legal Expert System". (S1993)

Referee for Ph.D candidate George Vossos, Computer Science and Computer Engineering Department, La Trobe University, Bundoora, Victoria, Australia. "A Unified Approach to the Problem of Combining Legal Rule-Based Reasoning with Case-Based Reasoning: The IKBALS Project."

Referee for Ph.D candidate Robert Walker, Department of Mathematics and Computer Science, Vrije Universiteit, Amsterdam, The Netherlands, "An Expert System Architecture for Heterogenous Domains: a Case-Study in the Legal Field" (F1992)

Chair, Ph.D. Committee, Vincent Aleven, Graduate Program in Intelligent Systems (ISSP). "Teaching Case-Based Argumentation Through a Model and Examples". (S1997)

Chair, Ph.D. Committee, Bruce McLaren, Graduate Program in Intelligent Systems (ISSP). "Assessing the Relevance of Cases and Principles Using Operationalization Techniques". (F1999)

Chair, Ph.D. Committee, Stefanie Bruninghaus, Graduate Program in Intelligent Systems (ISSP).

Chair, Ph.D. Committee, Ilya Goldin, Graduate Program in Intelligent Systems (ISSP). "A Focus on Content: The Use of Rubrics in Peer Review to Guide Students and Instructors". (F2011)

Chair, Ph.D. Committee, Collin Lynch, Graduate Program in Intelligent Systems (ISSP). "The Diagnosticity of Argument Diagrams". (S2014)

Chair, Ph.D. Committee, Matthias Grabmair, Graduate Program in Intelligent Systems (ISSP) "Modeling Purposive Legal Argumentation and Case Outcome Prediction Using Argument Schemes in the Value Judgment Formalism". (S2016)

Chair, Ph.D. Committee, Jaromir Savelka, Graduate Program in Intelligent Systems (ISSP) "Discovering Sentences for Argumentation about Meaning of Statutory and Regulatory Terms".

Kevin D. Ashley. January, 2018.

34

Chair, M.S. Committee, Vincent Aleven, "Automated Generation of Examples for a Tutorial in Case-Based Argumentation" (S1992)

Chair, M.S. Committee, Bruce McLaren (S1995)

Member, Ph.D. Committee, James Sherrer, School of Education.

Member, Ph.D. Committee, Sharon Hsaio, School of Information Science, "Navigation Support and Social Visualization for Personalized E-Learning" (F2012)

Member, Ph.D. Committee, Lelyn Saner, Department of Psychology, "Framing in the Wild: Expressions of Decisions in Real-World Situations" (S2008)

Member, Ph.D, M.S. Committees, Violetta Cavalli-Sforza, ISSP, "A Framework for Building a Computer-Based Argumentation Tutor" (MS - S1991)

Member, Ph.D Committee, Bing Leng, Computer Science Department "Constructing Comparative New Terms" (F1993)

Member, Ph.D Committee, Foster Provost, Computer Science Department, "Automatic Selection of Inductive Bias" (S1993)

Member, Ph.D Committee, Anoosh Shahidi, Intelligent Systems Program, "Evaluation of an Approach to Intelligent Coaching with Student Modeling" (F1993)

Member, Ph.D Committee, Atish P. Sinha, Katz Graduate School of Business, "A Constraint-Directed Case-Based Approach to Design Problem Solving" (S1993)

Member, Ph.D Committee, Bonnie W. Morris, Katz Graduate School of Business, "A Model of Auditor Evaluations of Internal Controls" (S1991)

Member, Ph.D Committee, Paul Bartha, Philosophy Department, "An Analysis of Analogical Reasoning" (S1995)

**Personal:**

Born: February 4, 1951, New York, New York.

Married.

References on request.