CURRICULUM VITA Kevin Dean Ashley

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Learning Research and Development Center University of Pittsburgh 424C Murdoch Building 3420 Forbes Avenue Pittsburgh, Pennsylvania 15260 (412) 624-7496

Research Interests:

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

 (1) Improve legal practice, decision-making, and education by developing legal text analytic approaches and computational models of case-based reasoning (CBR) and argumentation in law and practical ethics;
 (2) Develop techniques for linking computational models of legal reasoning with legal texts in order to facilitate acquiring and using knowledge in Artificial Intelligence (AI) programs;
 (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:

Awarded 2022 Codex Prize "in acknowledgement of significant and enduring contributions to Computational Law." Codex, The Stanford Center for Legal Informatics, Stanford Law School.

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, Faculty of Law of the University of Bologna, December, 2012 - 2019.

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. Seeon, 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:

Learning Research and Development Center Internal Grant entitled "Teaching Reading and Summarizing via Argument-Focused Text Annotation" (\$127,029) 2022-2024. With Scott Fraundorf.

National Science Foundation Award Id. IIS-2040490, "FAI: Using AI to Increase Fairness by Improving Access to Justice" (\$375,000) and Amazon (\$225,000) 2021-2024. PI with Diane Litman, co-PI.

Pitt Momentum Funds 2022-24 Scaling Grants Award, "Center for Text Analytic Methods in Legal Studies" (\$400,000). PI with James Anderson, Daqing He, Rebecca Hwa, and Diane Litman, co-PIs.

Pitt Momentum Funds 2020-21 Teaming Grants Award, "Center for Text Analytic Methods in Legal Studies" (\$59,977). PI with James Anderson, Daqing He, Rebecca Hwa, and Diane Litman, co-PIs.

University of Montreal Autonomy through Cyberjustice Technologies (ACT) Project Scientific Committee Grant. "Pre-Conflict Decision Tools for Legal Practitioners." \$32,000 Can. Spring 2019.

German Academic Exchange Service (DAAD) Scholarship. "Annotating Legal Cases and Statutes for Argument Mining and Pedagogy." 2,150.00 EUR. May, 2018.

Pitt Cyber Accelerator Grant. "Annotating Machine Learning Data for Interpreting Cyber-Crime Statutes." \$4,500. November, 2018.

Pitt Cyber Accelerator Grant. "Applied Legal Data Analytics & AI." \$2,100. August, 2018.

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

<u>Dissertation</u>: "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.

<u>Post-Doctoral Researcher</u>: 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.

<u>Research Assistantships</u>: 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.

<u>Coursework</u>: 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: Applied Legal Analytics and AI, Artificial Intelligence and Law Seminar, Artificial Intelligence and Law Practicum, Intellectual Property, Cyberspace and Law, Computers and Law, Information Age Torts Seminar, Commercial Paper.

Co-developed and co-taught course entitled "Applied Legal Analytics and AI" offered in spring 2019-2024 to a combined group of law students and computer science undergraduate and engineering graduate students. The course culminates in joint projects engaging small teams of students in applying machine learning and text analytics to legal problems.

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 illdefined 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. 8th 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) 5th 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. <u>http://www.cspred.org/proceedings</u>

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/~collinl/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

Proceedings of the Workshop on Intelligent Tutoring Systems for Ill-Defined Domains at the 8th International Conference on Intelligent Tutoring Systems. Aleven, V., Ashley, K., Lynch, C., & Pinkwart, N. (Eds.) (2006). Jhongli (Taiwan), National Central University.

Refereed Articles in Journals and Collections:

How to improve the explanatory power of an intelligent textbook: a case study in legal writing. Sovrano, F., Ashley, K., Brusilovsky, P. L., & Vitali, F. (2024) *International Journal of Artificial Intelligence in Education*, 1-35.

"Empirical legal analysis simplified: reducing complexity through automatic identification and evaluation of legally relevant factors." Gray, Morgan A., Jaromir Savelka, Wesley M. Oliver, and Kevin D. Ashley. *Philosophical Transactions of the Royal Society A* 382, no. 2270 (2024): 20230155.

"The unreasonable effectiveness of large language models in zero-shot semantic annotation of legal texts." Savelka, J., & Ashley, K. D. (2023). *Frontiers in Artificial Intelligence*, 6.

"`Alexa, Write a Memo': The Promise and Challenges of AI and Legal Writing." Phelps, T., and Ashley, K. *Legal Writing: J. Legal Writing Inst.* 26 (2022): 329.

"Legal Information Retrieval for Understanding Statutory Terms". Savelka, J. and Ashley, K. (2021) *Artificial Intelligence and Law. https://doi.org/10.1007/s10506-021-09293-5.* Pp. 1-45.

"A Law School Course in Applied Legal Analytics and AI". Savelka, J., Grabmair, M. and Ashley, K. (2021) *Law in Context*, 37 (1): 1-41.

"Using AI to Analyze Patent Claim Indefiniteness". Alderucci, D., & Ashley, K. (2020). IP Theory, 9(1), 2.

"Sentence Boundary Detection in Adjudicatory Decisions in the United States." Savelka, J., Walker, V. R., Grabmair, M., & Ashley, K. D. (2017). *Traitement Automatique des Langues*, 58(2), 21-45.

"Experimental Evidence for Diagramming Benefits in Science Writing". Barstow, B., Fazio, L, Schunn, C., and Ashley, K. (2017), *Instructional Science*, 45(5), 537-556.

"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 Aleven, 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., Aleven, 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., Aleven, 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:

"Thirty years of artificial intelligence and law: the third decade." Villata, S., Araszkiewicz, M., Ashley, K., Bench-Capon, T., Branting, L.K., Conrad, J.G. and Wyner, A., 2022. *Artificial Intelligence and Law*, pp.1-31.

"Prospects for Legal Analytics: Some Approaches to Extracting More Meaning from Legal Texts". Ashley, K. *University of Cincinnati Law Review* 90:4 1207-1240 (2022).

"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:

"Adding Argumentation into Human Evaluation of Long Document Abstractive Summarization: A Case Study on Legal Opinions." Elaraby, Mohamed, Huihui Xu, Morgan Gray, Kevin D. Ashley, and Diane Litman. In *Proceedings of the Fourth Workshop on Human Evaluation of NLP Systems (HumEval) (Burger Colling 2024*, pp. 28-35. 2024.

"Automatic identification and empirical analysis of legally relevant factors." Gray, M., Savelka, J., Oliver, W., & Ashley, K. (2023, June). In *Proceedings of the Nineteenth International Conference on Artificial Intelligence and Law* (pp. 101-110).

"Can GPT Alleviate the Burden of Annotation?" Gray, M., Savelka, J., Oliver, W., & Ashley, K. (2023). In *Legal Knowledge and Information Systems* (pp. 157-166). IOS Press.

"Can GPT-4 Support Analysis of Textual Data in Tasks Requiring Highly Specialized Domain Expertise?" Savelka, J., Ashley, K. D., Gray, M. A., Westermann, H., & Xu, H. (2023). *Proceedings Sixth Workshop on Automated Semantic Analysis of Information in Legal Text* (ASAIL 2023), June, Braga, Portugal. CEUR-WS.org *arXiv preprint arXiv:2306.13906*.

"Argumentative segmentation enhancement for legal summarization." Xu, H., & Ashley, K. (2023) *Proceedings Sixth Workshop on Automated Semantic Analysis of Information in Legal Text* (ASAIL 2023), June, Braga, Portugal. CEUR-WS.org, arXiv preprint arXiv:2307.05081.

"Question-Answering Approach to Evaluate Legal Summaries." Xu, H., and Ashley, K. (2023) *Legal Knowledge and Information Systems* pp. 293-298 IOS Press.

"Explaining Legal Concepts with Augmented Large Language Models (GPT-4)." Savelka, J., Ashley, K. D., Gray, M. A., Westermann, H., & Xu, H. (2023). *arXiv preprint arXiv:2306.09525*.

"Toward Eliminating Hallucinations: GPT-based Explanatory AI for Intelligent Textbooks and Documentation." Sovrano, F., Ashley, K., & Bacchelli, A. (2023). In *CEUR Workshop Proceedings*, no. 3444, pp. 54-65. CEUR-WS, 2023.

"Pervasive Computational Law." Guitton, C., Tamò-Larrieux, A., Mayer, S., Ashley, K., Grabmair, M., Sartor, G., ... & van Dijck, G. (2023) *IEEE Pervasive Computing*, 22(3), 48-51.

"Toward Automatically Identifying Legally Relevant Factors." Gray, M., Savelka, J., Oliver, W., and Ashley, K. *Legal Knowledge and Information Systems*, Jurix 2022, pp. 53-62. IOS Press. Saarbrücken.

"Multi-granularity Argument Mining in Legal Texts." Xu, H. and Ashley, K. In *Legal Knowledge and Information Systems*, Jurix 2022. pp. 261-266. IOS Press. Saarbrücken.

"Toward an Intelligent Tutoring System for Argument Mining in Legal Texts." Westermann, H., Šavelka, J., Walker, V.R., Ashley, K.D. and Benyekhlef, K., 2022. In *Legal Knowledge and Information Systems* (pp. 133-142). IOS Press.

"Accounting for Sentence Position and Legal Domain Sentence Embedding in Learning to Classify Case Sentences" Xu, H., J. Savelka, and K. Ashley. In Legal Knowledge and Information Systems, pp. 33-42. IOS Press, 2021.

"On the Role of Past Treatment of Terms from Written Laws in Legal Reasoning." Savelka, J., and K. D. Ashley. *New Developments in Legal Reasoning and Logic: From Ancient Law to Modern Legal Systems* (2022): 379-395.

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"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 Aleven, 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 Aleven, 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

"A First Step Toward an Automated Evaluation of Reasonable Suspicion," Oliver, W.M., Gray. M.A., Savelka, J., and Ashley, K. (2023) Computational Data Science in Law Conference. Fordham Law School. August.

"A Brief History of the Changing Roles of Case Prediction in AI and Law." Ashley, K. D. (2019). *Law in Context. A Socio-legal Journal*, *36*(1), 93-112.

"Automatically Extracting Meaning from Legal Texts: Opportunities and Challenges." Ashley, K. (2019) in *Georgia State University Law Review* 35(4), 3. 1117-1151.

"Accounting for Legal Values." Ashley, K. (to appear) in *Computational Legal Studies: The Promise and Challenge of Data-Driven Research* (R. Whalen, Ed.) Edward Elgar (Forthcoming Edited Collection).

"Hypothesis Formation and Testing in Legal Argument." Ashley, K. (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 Autonoma de México, Mexico City. April, 2006.

"Teaching Creative Legal Reasoning with Examples from Supreme Court Oral Arguments." Ashley, K., Aleven, 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 Autonoma 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 Aleven, 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 (2021) In: Katz D, Dolin R, and Bommarito M, editors. *Legal Informatics*. Cambridge University Press: Cambridge, UK.

"Legal Informatics and the CISG" Ashley, K. in (F. Lachmayer, M. Pavčnik, E. Schweighofer, eds.) Festschrift for Hajime Yoshino. Internationales Rechtsinformatik Symposion (2019).

"Precedent and Analogy" Ashley KD (2018) In: Bongiovanni G, Postema G, Rotolo A, Sartor G, Valentini C, 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 60th 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 AAAI Fall Symposium*. Tech Report: FS-09-06 Menlo Park, California, AAAI 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, Seminars, Course Lectures:

Presented invited series of lectures at the University of Bologna, CIRSFID, entitled, "Introduction to AI and Law," "Models of Legal Argument: A Case-based Approach to Reasoning with Values," "Prospects for Legal Analytics, and "Do Case-Based Models of Legal Reasoning Fit in a Civil Law Context?" December 11-15, 2023.

Presented invited lectures, "AI & Law, CBR, and Legal Text Analytics," "Models of legal argument: Casebased Approaches," and "Prospects for Legal Analytics" at the Summer School on AI & Law, European University Institute, Badia Fiesolana, Italy. July10-14, 2023.

Presented invited series of lectures at the University of Bologna, CIRSFID, entitled, "Introduction to AI and Law," "Models of Legal Argument: A Case-based Approach to Reasoning with Values," and "Prospects for Legal Analytics: Some Approaches to Extract More Meaning from Legal Texts," December 5-7, 2022.

Presented invited lectures, "Introduction to AI and Law," "Case-based Models of Legal Argument," and "Prospects for Legal Analytics," virtually at the Summer School on AI & Law, European University Institute, Badia Fiesolana, Italy. July7 -14, 2022.

Presented invited lectures, "Introduction to AI and Law," "Case-based Models of Legal Argument," and "Prospects for Legal Analytics," virtually at the Summer School on AI & Law, European University Institute, Badia Fiesolana, Italy. July7 -14, 2022.

Presented invited lectures, "Introduction to AI and Law," "Case-based Models of Legal Argument," and "Prospects for Legal Analytics," virtually at the Summer School on AI & Law, European University Institute, Badia Fiesolana, Italy. July 8-16, 2021.

Presented invited lectures, "Legal Text Analytics: Opportunities and Challenges," virtually in Prof. Monica Palmirani's Seminar on Data Science for Legal Analytic at the University of Bologna. May 10, 2021, and "Hot Topics in Legal Text Analytics," virtually in Prof. Monica Palmirani's Course on Data Science for Lawyers at the University of Bologna. November 22, 2021.

Presented invited lecture, "Computational Models of Case-Based Reasoning," and participated in a Panel discussion: Law, AI, and Ethics, virtually at the 1st Munich Legal Tech Summer School, Technical University of Munich, Germany. August 3, 2021.

Presented invited seminars at the Summer School on AI and Law 2019, European University Institute, Department of Law entitled, "Introduction to and Short History of Artificial Intelligence & Law," "Models of Case-Based Legal Argument," and "Case Outcome Prediction from Text."

Delivered tutorial entitled, "An Introduction to Artificial Intelligence and Law," at Seventeenth International Conference on Artificial Intelligence and Law, ICAIL 2019, June, Montreal, CA.

Presented seminars entitled, "Research Progress in Artificial Intelligence and Law: an Intellectual Survey," at the School of Law of the University of Bologna. December 2013-2019.

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), Chambery, 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, Panel Discussions, Podcast Interviews:

Presented invited talk, "Using Generative AI to Model Case-based Legal Argument," at the 27th Aula Magna, Pontifical Catholic University of Peru, Lima. November 27, 2023.

Presented invited talk, "Modeling Case-based Legal Argument in an Age of Generative AI," IDEAL workshop on CS, Law, and Policy Oct. 25, 2023. Northwestern University.

Presented invited talk, "Recent Developments in Legal Text Analytics", U. Miami School of Law, March 9, 2023

Participated in Panel Discussion on key technological characteristics of AI technologies and their role in legal practice re resolving disputes. Autonomy through CyberJustice Technologies Project, University of Montreal. October 6, 2022.

Invited talk on "Update on Case Summarization Research in NSF Fairness in AI Project, 'Using AI to Increase Fairness by Improving Access to Justice''. Autonomy through CyberJustice Technologies Project, University of Montreal. June 12, 2022.

Invited remote talk on "How Can Text Analytics Explain Legal Predictions?" at Conference on Artificial Intelligence and Judicial Big Data, Huazhang University of Science and Technology, October 15, 2022.

Presented invited talk, "Legal Text Analytics and its Role in AI and Law", Princeton Chapter of ACM, May 19, 2022

Presented invited talk, "Research Progress in Legal Text Analytics," virtually at the Symposium on Artificial Intelligence and Law co-organized by IIT Kharagpur, IIT Kanpur, IISER Kolkata, TCG CREST, WBNUJS, and Vidhi Centre for Legal Policy (all from India) and CSIRO Australia. June 2, 2021.

Presented invited talk, "Hot Topics in Legal Text Analytics," virtually in The Technological Innovation and Law (TIL) 2021 Program on Human brain - AI - Law. University of Pavia. September 16, 2021.

Presented invited keynote address, "AI and Law: from Knowledge-based to Machine Learning (and Back?)" virtually at the Computational Legal Studies: Past, Present, and Future Conference, The Centre for Computational Law, Singapore Management University. March 2, 2022.

Presented invited short talk, "Applying Text Analytic Methods to Drug Interdiction Auto Stop Cases" virtually at the CrossJustice Final Conference on Empowering Defence Rights through Algorithms and AI. University of Bologna. February 25, 2022.

Presented invited talk, "Teaching Applied Legal Analytics and A.I. in Law School" Case Western Reserve University, School of Law, July 14, 2022. 2

Co-presented invited talks, "Alexa! Write a Memo": The Promise and Challenges of AI and Legal Writing, at the Symposium on Artificial Intelligence and the Legal Profession, Legal Writing Institute, September 25, 2021 and at the Legal Writing Institute Symposium, Western Regional Legal Writing Conference, November 13, 2022.

Organized and moderated program on Legal Text Analytics and Empirical Legal Studies virtually in the CS+Law Research Presentations and Discussions Series featuring "Large Language Models and the Law," Prof. Daniel E. Ho, Stanford University, and "Reading (Judges') Minds with Natural Language Processing," Prof. Elliott Ash, ETH Zurich. March 11, 2022.

Participated in panel discussion on "Developments in LegalTech" and delivered short presentation entitled "New Developments in Legal Text Analytics" at University of Cincinnati College of Law Corporate Law Symposium, Advances in Legal Analytics, March 12, 2021.

Presented invited talk entitled "Progress in Teasing Meaning from Legal Texts" in AI@TR Invited Speaker Series, Thomson Reuters, March 2, 2021.

Participated in panel discussion on "Data as Power" and delivered short presentation entitled "Legal Text Data as Power! (*some limitations may apply*)" at the Law Review Symposium: Artificial Intelligence and the Law, West Virginia University College of Law, February 26, 2021.

Participated in panel discussion on Computation and Legal Services and delivered short presentation entitled "Opportunities and Challenges of Legal Text Analytics" at Northwestern University Academic Symposium, Law + Computation: An Algorithm for the Rule of Law and Justice? February 5, 2021.

Presented invited talk entitled "The Role of AI in Legal Analytics" virtually at the Centre of Excellence in Cyber Law and Data Protection Law, ICFAI Law School, IFHE, Hyderabad, India. January 29, 2021.

Presented invited keynote address entitled "Progress in Teasing Meaning from Legal Texts" at the International Workshop on Mining and Learning in the Legal Domain (MLLD-2020) of the 20th IEEE International Conference on Data Mining (virtual), November 17, 2021.

Presented short talk entitled "A Law School Course to Teach Applied Legal Analytics and AP" at SubTech 2020 (virtual), July 16, 2020.

Presented invited keynote address entitled "Teaching Law Students about AI and Text Analysis" at the Research Meets Practice (ReMeP) Legal Informatics Conference (virtual), June 8, 2020.

Co-presented invited talk entitled "Artificial Intelligence for Corporations and Law Firms: New Tools and Unmet Possibilities," with Practicing Law Institute, San Francisco (via Zoom), April 2020.

Presented invited talk entitle "Automatically Extracting Meaning from Legal Texts: Opportunities and Challenges" at the University of Pittsburgh School of Law, March, 2020.

Presented invited keynote lecture entitled "Teaching Legal Analytics and AI to Law Students" at the European Center for Law, Science, and New Technologies, University of Pavia, February, 2020.

Participated in panel discussion at "AI and Justice in 2035" Roundtable and presented paper entitled "(When) Will Legal Apps Be Able to Read like Lawyers?" University of California at Los Angeles School of Law, Los Angeles, CA. February, 2020.

Presented invited talk entitled "Teaching Legal Analytics and AI to Law Students" at the 4th International Workshop on MIning and REasoning with Legal texts (MIREL), Madrid. December, 2019.

Presented talk entitled, "How to Teach Applied Legal Analytics and AI to Law Students, a Report" at Stanford Law School as part of the CodeX Speaker Series, sponsored by the Stanford CodeX: Center for Legal Informatics. November, 2019.

Invited talk entitled "Annotating Texts for Legal Pedagogy and Machine Learning" at Board of Visitors Meeting, Learning Research and Development Center, University of Pittsburgh. October 13, 2019.

Presented invited talk entitled "Automatically Extracting Meaning from Legal Texts: Opportunities and Challenges," at the International Conference on New Technologies and Law, Hangzhou Normal University Law School, Hangzhou, China, and invited talks entitled, "Modeling Case-Based Legal Reasoning," and "Automatically Extracting Meaning from Legal Texts: Opportunities and Challenges," at the Faculties of Law, Zhejiang University, Hangzhou, and Nanjing University, Nanjing, China, June / July, 2019.

Presented two invited public lectures entitled "Text Analytics in Legal Practice: Opportunities and Challenges" at the University of Queensland, Technology and the Future of the Legal Profession Program, and at the Supreme Court of Queensland, Brisbane, Australia. May 16, 2019.

Invited talk entitled "Connecting Case Texts and Computational Models of Legal Reasoning" at Plenary Session of Conference on Artificial Intelligence: Thinking About Law, Law Practice, and Legal Education, Duquesne University School of Law. Pittsburgh, Pennsylvania. April 26, 2019.

Invited talk entitled "Automatically Extracting Meaning from Legal Texts: Opportunities and Challenges." Georgia State University Law Review Symposium - Legal Intelligence through Artificial Intelligence. April 5, 2019.

Invited keynote lecture entitled "Artificial Intelligence and Legal Analytics: New Tools for Law Practice in the Digital Age" at the Legal Datamining Conference, HEC Paris, France. March 21, 2019.

Invited talk entitled "Annotating Cases and Statutes for Legal Pedagogy (and Machine Learning)" at Legal Writing Institute One-Day Workshop, Leveraging Technology in the Legal Writing Classroom to Prepare Law Students for Practice, University of Pittsburgh School of Law, November 30, 2018.

Recorded podcast interview for London School of Economics Alumni Association London series entitled "Law 2.0 Legal Services & Emerging Tech. October 17, 2018.

Invited talk entitled "Legal Text Analytics: Opportunities and Challenges Where Law and AI Meet" at University of São Paulo Colloquium, Brazil. September 22, 2018.

Invited talk entitled "Legal Text Analytics: Opportunities and Challenges Where Law and AI Meet" at the Second International Congress of Law, Government & Technology, University of Brasília. Brazil. September 21, 2018.

Invited talk entitled "Addressing a Challenge for US Legal Education: A Law School Course on Applied Legal Data Analytics & AI" at the Fifteenth International Conference on Substantive Technology in Legal Education and Practice (SubTech 2018), IT Law Programme at the University of Tartu. Tallinn, Estonia. July 13, 2018.

Invited talk entitled "Accounting for Legal Values." Computational Legal Studies Workshop. University of Hong Kong. June, 2018.

Invited talk entitled "Legal Text Analytics or How Law Meets AI; Opportunities and Challenges." Luxembourg Institute of Science and Technology. 23 May 2018.

Invited keynote address entitled "Applying Text Analytics in the Legal Domain: Possibilities and Problems." Legal Aspects of Data Science Conference. Tilburg University, The Netherlands. 18 May 2018.

Presented invited talk entitled "Artificial Intelligence and Legal Practice" at the University of Heidelberg (U. Heidelberg) Faculty of Law Doctoral Research Group in "Digital Law" (i.e., Promotionskolleg Digitales Recht). Germany. 16 May 2018.

Presented invited talk entitled "Introducing Legal Hypotheses and Hypothetical Reasoning" at the Karlsruhe Institute of Technology, Institute of Philosophy. Karlsruhe, Germany. 15 May 2018.

Presented invited talk entitled "Computationally Modeling Case-Based Legal Reasoning" at the Karlsruhe Institute of Technology, Institute of Theoretical Informatics. Karlsruhe, Germany. 14 May 2018.

Presented invited talk entitled "Semantic Analysis of Legal Texts: Challenges and Opportunities" at the Technical University of Munich, Department of Informatics, Program on Software Engineering for Business Information Systems. Germany. 7 May 2018.

Presented invited research seminar entitled "Argumentation with Value Judgments; An Example of Hypothetical Reasoning" at the Institute of Philosophy, Karlsruhe Institute of Technology. Karlsruhe, Germany. 5 May 2018.

Presented invited talk entitled "Modeling Case-Based Legal Reasoning" at the University of Ulm. Germany. May 3, 2018.

Invited talk entitled "Legal Liability of Autonomous Systems and Implications for Norms-based Systems: an Overview." Dagstuhl Seminar 18171, Normative Multi-Agent Systems. 23 April 2018.

Invited presentation entitled "Artificial Intelligence and Legal Practice". In Wells Fargo Law Firm Client Luncheon. Chicago, IL. March 19, 2018.

Invited presentation entitled "Artificial Intelligence and Legal Practice". In Wells Fargo Law Firm Client Luncheon. Houston, TX. February 21, 2018.

Invited presentation entitled "Artificial Intelligence and Legal Practice". In Wells Fargo Law Firm Client Luncheon. Dallas, TX. February 20, 2018.

Invited presentation entitled "Artificial Intelligence and Legal Practice". In Wells Fargo Law Firm Client Luncheon. Miami, FL., February 10, 2018.

Helped organize and participated in presenting program entitled "Artificial Intelligence and Legal Practice" for the Allegheny County Bar Association. Pittsburgh, PA. February 2, 2018.

Invited presentation entitled "Utilizing Vector Space Models for Identifying Legal Factors from Text". At the 30th International Conference on Legal Knowledge and Information Systems. Jurix 2017. Luxembourg. December 14, 2017.

Panel presentation for Jurix 2017 Workshop on Legal Data Analysis panel on "The Future of Legal Data Analysis?" The 30th International Conference on Legal Knowledge and Information Systems. Jurix 2017. Luxembourg. December 2017.

Invited talk entitled "Utilizing Vector Space Models for Identifying Legal Factors from Text". In National Institute of Informatics. Tokyo, Japan. November 15, 2017.

Invited keynote speech entitled "Mining Information from Statutory Texts: A Case Study". In Eleventh International Workshop on Juris-informatics (JURISIN 2017). Tokyo, Japan. November 14, 2017.

Invited tutorial entitled "An Introduction to Artifical Intelligence and Law". In National Institute of Informatics. Tokyo, Japan. November 13, 2017.

Presented invited graduate seminars on Artificial Intelligence and Legal Analytics. In Digital Law program of the University of Heidelberg Faculty of Law. Heidelberg, Germany. (2018, January 15).

Invited panel participation entitled "Artificial Intelligence (AI) in the Legal Industry: The role of AI and its impacts". In Wells Fargo Law, Leadership and Vision 2017 Meeting. Washington, DC. (2017, June 6).

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 Mediterranée, 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 talk 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 illdefined 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 Autonoma 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 Katholic 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. (ICCBR-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. Seeon, Germany. 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 (ICCBR-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.

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:

Sub-project Chief, Pre-Conflict Decision Tools For Legal Practitioners, Working Group on Conflict Prevention, Autonomy through CyberJustice Technologies Project, University of Montreal. 2018-2019.

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

Conference Chairperson, 13th 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. 8th 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 AAAI-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 (AAAI) 2019, 2018, 2017, 2016, 2014, 2008, 2007, 2006, 1996, 1994, 1992, 1991, 1990.

International Joint Conference on Artificial Intelligence, 2017, 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. 2021, 2019, 2017, 2015, 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 to present. Intelligent Tutoring Systems (ITS) 2020, 2019, 2018, 2014, 2012, 2008 Workshop on Legal Data Analytics and Mining (LeDAM 2018) Legal Data Analysis (2017) International Conference on AI and Education 2015, 2017. Automated Semantic Analysis of Information in Legal Text Workshop (ASAIL) 2015, 2017, 2019. The 8th Workshop on Argument Mining held Online in the Dominican Republic at the 2021 Conference on Empirical Methods in Natural Language Processing. November 10 – 11, 2021. International Workshop on Mining and Learning in the Legal Domain (MLLD-2021) December 7-10, 2021, Auckland, New Zealand.

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, Einstein Strategic Professorship, Einstein Foundation, Berlin.

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.

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

Committee Memberships / Service at the University of Pittsburgh School of Law:

Faculty advisor for 80th Law Review Publishing Anniversary Symposium on "The Net without Neutrality: Economic, Regulatory, and Informational Access Impacts. March 1, 2019. Faculty Student Advisor 2017, 2018, 2019 Writing Awards Committee 2018-2019 Committee on Petitions and Academic Standards, 2014-2015, Chairperson; 2015-2016; 2016-2017, 2018, 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:

Member, SCI/LRDC joint faculty appointment search committee, fall 2023 and spring 2024. 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:

Served as outside reader of dissertation of Dean Alderucci, Carnegie Mellon University, December, 2022

Outside reader of dissertation of Paheli Bhattacharya, "Text and Graph Processing Methods for Assisting Legal Practitioners", Indian Institute of Technology Kharagpur.

Outside reader of dissertation of Masha Medvedeva, "Identification, Categorisation and Forecasting of Court Decisions", University of Groningen.

External committee member, Ph.D. Committee for Saurabh Chakravarty, Virginia Polytechnic Institute and State University, "Summarizing Legal Depositions". (F2020)

Reviewer for Ph.D. Candidate Mattia Falduti, Università degli Studi di Milano, "Law and Data Science: Knowledge Modeling and Extraction from Court Decisions". (F2020)

Outside reader for Ph.D. candidate Joerg Landthaler, Technical University of Munich, Germany, "Improving Semantic Search in the German Legal Domain with Word Embeddings." (S2020)

External examiner for Ph.D. candidate Sameerchand Pudaruth, University of Mauritius, "Categorisation and Summarisation of Mauritian Legal Judgements using Machine Learning Techniques". (S2020)

Outside member, Ph.D. Committee for Dean Alderucci, Language Technologies Institute, Carnegie Mellon University, "Automating Patent Analysis Using Deep Learning-Based Natural Language Processing."

Outside reader for Ph.D. candidate Bernhard Waltl, Technical University of Munich, Germany, "Semantic Analysis and Computational Modeling of Legal Documents." (S2018)

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."

Refereee 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, Mohammad Falakmasir, Graduate Program in Intelligent Systems (ISSP) "Factor Aware Legal Analytics and Knowledge Extraction".

Chair, Ph.D. Committee, Jaromir Savelka, Graduate Program in Intelligent Systems (ISSP) "Discovering Sentences for Argumentation about Meaning of Statutory and Regulatory Terms". (S2020)

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, Luca Luigini, Department of Computer Science, School of Computers and Information, University of Pittsburgh. "Analysis of Collaborative Argumentation in Text-Based Classroom Discussions." (S2021)

Member, Ph.D. Committee, Zahra Rahimi, Intelligent Systems Program, School of Computers and Information, University of Pittsburgh. "Entrainment Measures for Multi-Party Spoken Dialogues."

Member, Ph.D. Committee, James Scherrer, School of Education. "Investigating the Relationship between "Effective" Teachers and Theoretical Notions of Effective Teaching: An Analysis of Whole-Group Discussions" (Su2013)

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.