Deborah L. McGuinness, PhD



Tetherless World Senior Constellation Chair Professor of Computer Science and Cognitive Science Rensselaer Polytechnic Institute

USA citizen; Clearance (on request)

Social Security # (on request)

http://www.cs.rpi.edu/~dlm

dlm@cs.rpi.edu

518-276-4404 phone

518-276-4464 Fax

Twitter: @dlmcguinness

Professional Preparation

Duke University

Computer Science

B.S. 1980

Mathematics

B.A. 1980

With Highest Honors

University of California, Berkeley Computer Science M.S 1981

Thesis Title: An Inferencing Language for Relational Geometric

Databases

Advisor: Dr. Eugene Wong

Rutgers University Knowledge Representation Ph.D. 1997 Thesis Title: Explaining Reasoning in Description Logics

Advisor: Dr. Alex Borgida

Professional Experience

2007- pres Tetherless World Constellation Chair

Rensselaer Polytechnic Institute, Troy, NY

Professor of Computer Science Professor of Cognitive Science

Director of the Web Science Trust Network Lab (2008-pres)

Co-Director Health Analytics, IDEA

1998-pres CEO McGuinness Associates (Small Woman-Owned Consulting

Business)

2004- 2007 Co-Director and Senior Research Scientist – Knowledge Systems,

Artificial Intelligence Laboratory, Stanford University, Stanford, CA

1998-2004 Associate Director and Senior Research Scientist - Knowledge Systems

Laboratory Stanford University, Stanford, CA;

1995-1998 Principal Member of Technical Staff - Artificial Intelligence Principles

Research Department - Information Systems and Services Research-

AT&T Laboratories Research



Member of Technical Staff- Artificial Intelligence Principles Research
 Department - Information Systems and Services Research- AT&T Bell
 Laboratories. Rotational management position from '96-97 as Emerging
 Technologies and Opportunities District Manager, Personal Online
 Services, AT&T Strategy and New Service Innovation.
 Member of Technical Staff, AT&T Bell Laboratories Home Information
 Systems (80-84), Computing Environments and Artificial Intelligence (84-85)

Professional Service

Advisory Roles

- Franz Inc.: Technology advisory board member for a technology company with expert knowledge in developing and deploying Semantic Web technologies and providing Common Lisp based tools that offer an ideal environment to create complex, mission-critical applications. (2009-present)
- Orbmedia: Technology advisory board member for a non-profit next generation journalism company focused on producing world-class journalism that strengthens global understanding of the interdependent world. (2011-present)
- Qualcomm: Advisor to the context aware mobile computing division for a leading wireless technology company. (2011-present)

Expert Witness

Served as a consultant for numerous patent litigation cases, most of which are not public. I have helped with due diligence, Markman hearing preparation, expert report preparation, deposition preparation and execution, and trial preparation and execution. I have worked on validity and infringement cases and have represented claimants and defendants.

I served as an expert testifying witness in the Versata (Trilogy) vs. Sun Microsystems Civil Action No 2:06-CV-358-TJW case. I worked for Sun through the Skadden, Arps, Slate, Meagher & Flom legal firm. I authored an 800 page expert witness report, which succeeded in eliminating numerous claims from the suit. I was deposed in this case and then further served as a testifying invalidity witness. Versata sought more than 100 million in damages and I helped the Sun side win the case, which was decided on April 27, 2009.

http://www.eweek.com/c/a/Application-Development/Sun-Successfully-Defends-Itself-Against-100M-Patent-Suit-694198/

Previous Technical Advisory Boards (helped through acquisition)

 Applied Semantics: A knowledge organization solutions company. Acquired by Google in 2003.



- Blue Chip Expert: Technology advisory board member for a startup company supporting semantically-enabled fulfillment of executive and contract search requests. (bluechipexpert.com)
- Guru Worldwide: A new-generation staffing company. (www.guru.com) Acquired by Unicru (now www.kronos.com).
- Cerebra: Member of founding technology advisory board for a semantic web solutions company. Assisted in funding as well as technical aspects and supported due diligence prior to asset acquisition by WebMethods.
- Radar Networks Member of the founding technology advisory board (2003-2010) for a startup company concerned with providing technology to support the next generation of the web, sometimes called Web 3.0. Additionally, helped obtain funding from Vulcan Capital to capitalize the company and supported due diligence during acquisition by EVRI in 2010.
- Tumri Technology advisory board member for a context-oriented online content startup company.
- Katalytik Technology advisory board member for a startup company concerned with improving healthcare through better health information technology.

Executive Council Member / Advisory Board / Leadership Team (Academic):

- Smithsonium Encyclopedia of Life Advisory Board, 2013-present
- DataOne: (2011-present) Senior leadership team member for first and largest NSF DataNet award. Co-Chair of the Interoperability and Semantics Working group.
- NIST Ontology Summit Advisory Board (2008-2012). Appointed to advise on ontology research issues for annual ontology summit.
- Information and Communication Technology for Sustainable and Optimised Building Operation Scientific Advisory Board (2009-2011)

 – University College, Cork, Ireland
- Oregon State University Ecosystem Informatics Division: (2006-2009 Phase 1 and 2009-2011 Phase II) - Appointed advisory position for an interdisciplinary informatics division supporting ecosystem research. (http://oregonstate.edu/leadership/strategic-plan/informatics)
- Semantic Web Science Association. (2000-2006) Founding advisory board member for the organization promotes scholarly work on the semantic web internationally. The organization oversees the international semantic web conference series, related conference proceedings, and the journal of web semantics. (http://swsa.semanticweb.org/)
- American Association for Artificial Intelligence (1998-2002) Elected advisor for the
 scientific society devoted to advancing scientific understanding of the mechanisms
 underlying thought and intelligent behavior and their embodiment in machines. This
 organization oversees and sponsors the yearly AAAI and IAAI conference series, two
 major yearly symposium series, multiple other scientific workshops, a quarterly
 magazine, and the affiliated AI Journal. (aaai.org)



- International Organization for Knowledge Representation and Reasoning. (2001-2004) Appointed advisory board member for the scientific organization that fosters research and communication on knowledge representation and reasoning. The organization oversees the yearly international conference series, related proceedings, and KR-related mailing lists. (kr.org)
- International Organization for Description Logics, (2001-2003) Elected steering committee member for the organization responsible for supporting research in description logics. The organization oversees the yearly description logic workshop, affiliated publications, and maintains online resources concerning description logics. (dl.kr.org)
- International Organization for Conceptual Structures, (2001-2003) Appointed
 editorial board member for the organization that promotes research on the formal
 analysis and representation of conceptual knowledge with applications to artificial
 intelligence, computational linguistics, and related areas of computer science. The
 organization also oversees a yearly international conference series, related
 publications, and online resources.

Conference Program Chair/Co-Chair:

<u>Conference on Information and Knowledge Management</u>, Lisbon, Portugal, November, 2007

<u>American Association for Artificial Intelligence Conference</u>, San Jose, Ca. July 2004 <u>International Knowledge Representation and Reasoning Conference</u>, Toulouse France, April 22-25, 2002

Selected Workshop General / Program Chair/Co-Chair:

<u>International Provenance and Annotation Workshop</u>, General Chair, Troy, NY, June 14-17, 2010.

Proof Combination and Evaluation Workshop at the International Joint Conference on Automated Reasoning (IJCAR), 2010

<u>Linked AI: AAAI Spring Symposium on Linked Data Meets Artificial Intelligence</u>, Stanford, CA, March 22-24, 2010.

<u>Semantic Scientific Knowledge Integration, AAAI Spring Symposium</u>, Stanford, CA, March 26-28, 2008.

<u>Earth and Space Science Cyberinfrastructure: Application and Theory of Knowledge Representation</u> the American Geophysical Union Joint Assembly Fall Meeting, San Francisco, CA, December 11-15, 2006.

<u>Contexts and Ontologies: Theory, Practice, and Applications</u>. Riva del Garda, Italy. August 28, 2006.

<u>Earth and Space Sciences Ontology Workshop</u>, Johns Hopkins University, Applied Physics Lab, Laurel, MD., May 26, 2006.

<u>Semantic Scientific Data Integration</u>, the American Geophysical Union Joint Assembly, Baltimore, Maryland, May 23-25, 2006.



Volcano Ontology Workshop. San Diego Super Computer Center, San Diego, Feb 15-16, 2006. (Results to be presented at AGU06, May 2006).

Ontologies for Earth and Space Sciences, Earth and Space Science Informatics. American Geophysical Union Fall Meeting, Moscone Center, San Francisco, December 8, 2006.

Contexts and Ontologies: Theory, Practice, and Applications. AAAI Workshop, Pittsburgh, Pa., July 2005.

<u>IEEE Enterprise Distributed Object Computing Conference, Model-Driven semantic Web (MDSW 2004)</u>. Monterey, Ca., September 2004.

<u>Workshop on Configuration</u>, International Joint Conference on Artificial Intelligence, Seattle, Washington, August 6, 2001.

<u>International Description Logic Workshop</u>, August 1-3, 2001, Stanford, CA., USA <u>International Semantic Web Workshop</u>, July 30-31, 2001, Stanford, CA., USA. This was the first meeting of the international semantic web community and it has now turned into a conference series called the International Semantic Web Conference, which has been held every year since 2002.

AAAI Fall Symposium Series Workshop on Configuration, Boston, Mass., November, 1996.

1996 International Workshop Description Logics, Boston, Mass., November, 1996, AAAI Fall Symposium Series Workshop on Issues in Description Logics: Users Meet Developers, Boston, Mass., 1992.

Selected Organizing Committee (other than program or conference chair):

<u>International Semantic Web Conference 2002</u>. Sardinia, Italy. Sponsor Chair, June 2002. <u>Knowledge Representation and Reasoning 2000</u> Breckenridge, Colorado, Local Arrangements Chair USA, April, 2000.

Journal Associate or Guest Editor:

<u>Journal of Earth Science Informatics</u> (JESI - Springer), Founding Associate Editor, 2006-present.

<u>IEEE Intelligent Systems,</u> Special Issue Editor on Semantic Scientific Knowledge Integration, 2009 24(1)

Information Systems Journal on Information and Knowledge Management, guest editor, 2009.

ACM transactions on Internet Technology. Associate Editor, 2002-2006 Electronic Transactions in Artificial Intelligence. Area editor for SEMWEB (Modeling Semantics of Web Information: Theory, Methods, and Applications), 2000-2001. AI-EDAM Journal, Special Issue on Configuration, Guest Editor, 1998.

Journal for Conceptual Systems, Special Issue on Knowledge Retrieval, Use, and Storage for Efficiency, Guest Editor, 1997.

Member

W3C <u>Provenance Working Group</u>. 2011 –2014. Founding member and editor of the ontology recommendation note.

NASA Technology Infusion Working Group, 2007-present



DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

