

Dr. Timothy Wilking Finin

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Professional Preparation

- S.B. in Electrical Engineering, Massachusetts Institute of Technology, 1971. thesis: Three Problems in Analyzing Scenes, advisor: Patrick H. Winston
- M.S. in Computer Science, University of Illinois, Urbana-Champaign, 1977. thesis: An Interpreter and Compiler for Augmented Transition Networks, advisor: David L. Waltz
- Ph.D. in Computer Science, University of Illinois, Urbana-Champaign, 1980. dissertation: The Semantic Interpretation of Compound Nominals, advisor: David L. Waltz

Appointments

- 2024- Director, UMBC Center for Artificial Intelligence
- 2017- Willard and Lillian Hackerman Chair in Engineering, UMBC
- 2014-15: Johns Hopkins University (Sabbatical leave)
- 2007-: Research Scientist, Human Language Technology Center of Excellence, Johns Hopkins Univ.
- 2007-08: Johns Hopkins Applied Physics Laboratory (Sabbatical leave)
- 1999- 01: Director, Institute for Global Electronic Commerce, UMBC, Baltimore, MD
- 1991-95: Professor and Chair, Department of Computer Science, UMBC
- 1991- : Professor of Computer Science and Electrical Engineering, UMBC
- 1987-91: Technical Director, Knowledge-Based Information Processing, Unisys Center for Advanced Information Technology, Paoli, PA
- 87-91: Adj. Assoc. Professor, Computer & Information Science, U. of Pennsylvania, Philadelphia PA
- 1980-87: Assistant Professor, Computer and Information Science, U. of Pennsylvania, Philadelphia PA
- 74-80: Research Assistant, Research Associate, Coordinated Science Lab, U. of Illinois, Urbana IL
- 1977: Research Intern, Computer Science Department, IBM Research Lab, San Jose CA
- 1971-74: Research Staff, Artificial Intelligence Laboratory, M.I.T., Cambridge MA
- 1970: Research Assistant, The Cambridge Project, M.I.T., Cambridge MA

Recent relevant publications (profiles on [Google Scholar](https://scholar.google.com/) and [DBLP](https://dblp.org/))

- Aamir Hamid, Hemanth Reddy Samidi, Tim Finin, Primal Pappachan, Roberto Yus, GenAIPABench: A Benchmark for Generative AI-based Privacy Assistants, Proceedings on Privacy Enhancing Technologies (PoPETs), Volume 2024, number 3, 2024.
- Ankur Padia, Frank Ferraro, and Tim Finin, Enhancing Knowledge Graph Consistency through Open Large Language Models: A Case Study, AAAI-MAKE: Empowering Machine Learning and Large Language Models with Domain and Commonsense Knowledge, AAAI Spring Symposia, March 2024
- Hakju Oh, Boonserm (Serm) Kulvatunyou, Albert Jones, and Tim Finin, Employing Word-Embedding for Schema Matching in Standard Lifecycle Management, Journal of Industrial Information Integration, Elsevier, 2024.
- Vijay Kumar, Varish Mulwad, Jenny Weisenberg Williams, Tim Finin, Sharad Dixit, and Anupam Joshi, Knowledge Graph-driven Tabular Data Discovery from Scientific Documents, TaDA'23: Tabular Data Analysis Workshop, VLDB, Sept. 2023.
- Varish Mulwad, Vijay S Kumar, Jenny Weisenberg Williams, Tim Finin, Sharad Dixit, Anupam Joshi, Towards Semantic Exploration of Tables in Scientific Documents, Workshop on Semantic Technologies for Scientific, Technical and Legal Data, Proc. ESWC 2023, May 2023. Best paper award.

Other significant publications

- Priyanka Ranade, Sanorita Dey, Anupam Joshi, Tim Finin, Computational Understanding of Narratives: A Survey, IEEE Access, v10, pp. 101575-101594, September 2022.
- Sai Sree Laya Chukkapalli, Anupam Joshi, Tim Finin, and Robert F. Erbacher, CAPD: a context-aware, policy-driven framework to support secure and resilient IoBT Operations, Artificial Intelligence and Machine Learning for Multi-Domain Operations Applications IV, SPIE Defense + Commercial Sensing, April 2022.
- Casey Hanks, Michael Maiden, Priyanka Ranade, Tim Finin, and Anupam Joshi, Recognizing and Extracting Cybersecurity-relevant Entities from Text, Workshop on Machine Learning for Cybersecurity, International Conference on Machine Learning, PLMR, July 2022.
- Priyanka Ranade, Sanorita Dey, Anupam Joshi, Tim Finin, Computational Understanding of Narratives: A Survey, IEEE Access, v10, pp. 101575-101594, September 2022.
- Lavanya Elluri, Sai Sree Laya Chukkapalli, Karuna Pande Joshi, Tim Finin, Anupam Joshi, A BERT Based Approach to Measure Web Services Policies Compliance with GDPR, IEEE Access, Oct. 2021.
- Priyanka Ranade, Aritran Piplai, Sudip Mittal, Anupam Joshi, Tim Finin, Generating Fake Cyber Threat Intelligence Using Transformer-Based Models, Joint Conf. on Neural Networks, IEEE, 2021.
- Jennifer Sleeman, Tim Finin, and Milton Halem, Understanding Cybersecurity Threat Trends through Dynamic Topic Modeling, Frontiers in Big Data, Frontiers Media, 2021.
- Aritran Piplai, Sudip Mittal, Anupam Joshi, Tim Finin, James Holt, and Richard Zak, Creating Cybersecurity Knowledge Graphs from Malware After Action Reports, IEEE Access, Nov. 2020.
- Aritran Piplai, Sudip Mittal, Anupam Joshi, Tim Finin, James Holt, and Richard Zak, Creating Cybersecurity Knowledge Graphs from Malware After Action Reports, IEEE Access, Nov. 2020.a
- Sai Vallurupalli, Jennifer Sleeman, Tim Finin, Fine and Ultra-Fine Entity Type Embeddings for Question Answering, Int. Semantic Web Conf., Nov. 2020.

Synergistic Activities

- I have mentored 31 Ph.D. students who completed their degrees at UMBC or the University of Pennsylvania and more than 30 M.S. students who completed a thesis.
- I have received more than 90 research awards, contracts, and gifts to support research from government agencies and companies, including support from NSF, DARPA, NSA, NASA, NIST, ONR, and AFOSR.
- I was an editor-in-chief of the Elsevier Journal of Web Semantics (2006-2016), established in 2003 and ranked second by Google Scholar Metrics in the category *Database and Information Systems*. I co-edited the Viewpoints opinion column in the Communications of the ACM (2013-2022).
- I am a former AAAI councilor and former member of the Computing Research Association's board of directors. I am also an ACM Fellow (2018), a AAAI Fellow (2013), a UMBC Presidential Research Professor (2012-2015), a FIPA Fellow (1997), and an IEEE Technical Achievement Award recipient (2009). I was appointed the Willard and Lillian Hackerman Chair in Engineering at UMBC in 2017.
- I have been involved in several significant standardization efforts. In the 1990s, I was a member of the DARPA-NSF Knowledge Sharing Effort, which defined standards for multi-agent systems, including KQML and KIF, and the subsequent FIPA effort.
- I served as a member of the W3C Web Ontology Working Group that developed the specification for the OWL Semantic Web ontology language and the PI of one of the original DARPA DAML program projects that explored and evolved Semantic Web technology. I was a member of the W3C CSV on the Web Working Group, which developed a recommendation for higher interoperability of structured data.
- I have been general or program chair of major conferences, including the IEEE Conference on Artificial Intelligence for Applications (twice), the ACM Conference on Information and Knowledge Management (twice), the ACM Autonomous Agents Conference, the ACM Conference on Mobile and Ubiquitous Computing, the International Semantic Web Conference, AAAI's AI and the Web track (twice), and the IEEE Conference on Intelligence and Security Informatics.