

**SUSAN GAUCH**

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## BIOSKETCH

Dr. Gauch is a Professor in the Electrical Engineering and Computer Science department at the University of Arkansas. Her primary research field is Intelligent Information Agents. She received a Honours Bachelor of Science in Mathematics and Computer Science (First Class Honours) and Masters of Science in Computer Science from Queen's University at Kingston, Ontario, Canada. She received her Ph.D. from University of North Carolina at Chapel Hill in 1990 where she developed an expert search assistant for an online full-text database. While a Senior Research Scientist with the Biological Knowledge Laboratory at Northeastern University, she explored the storage, retrieval, and user interface technologies necessary to present and navigate databases of technical literature.

While at the University of Kansas, from 1993-2007, her research encompassed intelligent agents for information discovery and fusion from the World Wide Web (ProFusion), content-based searching of digital video libraries, an National Science Foundation-sponsored project on the application of corpus linguistics to the field of information retrieval, and another National Science Foundation project focusing on the use of ontologies of coordinating distributed information agents. Her work has been presented at numerous conferences and appears in major journals. Four projects (VISION, ProFusion, ProFilter and OBIWAN) have resulted in software licenses to industry from the University of Kansas. She is past Vice-Chair for the ACM Special Interest Group on Information Retrieval and is a reviewer for major funding organizations, conferences, and archival journals.

In 2007, Dr. Gauch joined the University of Arkansas to become the head of Computer Science and Computer Engineering where she remained active in research. Over her career, she has received research funding of over \$1.9 million as PI and over \$30 million as Co-PI. She has published more than 130 peer-reviewed papers resulting in 7200+ citations and supervised 11 PhD, 90 M.S., and 13 Honors graduates. Her current research focuses on fairness in academic paper peer review and the use of emotion analysis and machine learning to identify fake news. Dr. Gauch has received two campus-wide teaching awards, a Kemper Award for Excellence in Teaching at the University of Kansas and the Charles and Nadine Baum Faculty Teaching Award at the University of Arkansas.

Dr. Gauch has been a member of International Conference on Information, Process, and Knowledge Management (eKNOW) Program Committee since 2011 and a member of the Steering Committee since 2020. Starting in 2009, she has published and presented nine papers at the eKnow conference, winning a Best Paper Award three times. She has also published a paper in the IARIA Journal, : *International Journal on Advances in Systems and Measurements*, in 2023.

1. "Improving Minority Stress Detection with Emotions," Jonathan Ivey and Susan Gauch, *Sixteen Annual Conference on Information, Process, and Knowledge Management (eKNOW 2024)*, May 26-30, Barcelona, Spain.
2. "Sequence Graph Network for Online Debate Analysis" Quan Mai, Susan Gauch, and Douglas Adams, *Sixteen Annual Conference on Information, Process, and Knowledge Management (eKNOW 2024)*, May 26-30, Barcelona, Spain.

3. "Intermediate-task Transfer learning: Leveraging Sarcasm Detection for Stance Detection," Gibson Nkhata and Susan Gauch, *Sixteen Annual Conference on Information, Process, and Knowledge Management (eKNOW 2024)*, May 26-30, Barcelona, Spain. **Best Paper Award**
4. "Fine-tuning BERT with Bidirectional LSTM for Fine-Grained Movie Reviews Sentiment Analysis", Gibson Nkhata, Susan Gauch, Usman Anjum, and Justin Zhan, *IARIA Journals: International Journal on Advances in Systems and Measurements*, 16 (3&4), 2023.
5. "Fake News Identification Using Neural Language Models," Andrew L. Mackey, Susan Gauch, Jacob Fuller, Caden Williamson, and Kate Pearce, *Fourteenth International Conference on Information, Process, and Knowledge Management, (eKNOW 2022)*, June 26-30, Porto, Portugal. ISBN: 978-1-61208-986-7
6. "Optimizing Statistical Distance Measures in Multivariate SVM for Sentiment Quantification," Kevin Labille and Susan Gauch, *Thirteenth International Conference on Information, Process, and Knowledge Management, (eKNOW 2021)*, July 18-21, 2021, Nice, France. ISBN: 978-1-61208-874-7
7. "Detecting Fake News through Emotion Analysis," Andrew L. Mackey, Susan Gauch, and Kevin Labille, *Thirteenth International Conference on Information, Process, and Knowledge Management, (eKNOW 2021)*, July 18-21, 2021, Nice, France. ISBN: 978-1-61208-874-7 **Best Paper Award**
8. "Incorporating Diversity in Academic Expert Recommendation," Omar Salman, Susan Gauch, Mohammed Alqahtani, Mohammed Ibrahim, and Reem Alsaffar, *International Conference on Information, Process, and Knowledge Management (eKNOW 2020)*, Valencia, Spain, November 21-25, 2020,102-107.
9. "Miology: a Web Application for Organizing Personal Domain Ontologies," Mirco Speretta, and Susan Gauch, *International Conference on Information, Process, and Knowledge Management (eKNOW 2009)*, Cancun, Mexico, February 1-7, 2009,159-161.
10. "Ontology-based Focused Crawling," Hiep Luong, Susan Gauch and Qiang Wang, *International Conference on Information, Process, and Knowledge Management (eKnow 2009)*, Cancun, Mexico, February 1-7, 2009, 123-128. **Best Paper Award**