

PROMOTION RECOMMENDATION
THE UNIVERSITY OF MICHIGAN
SCHOOL OF INFORMATION

Qiaozhu Mei, associate professor of information, with tenure, School of Information, and associate professor of electrical engineering and computer science, without tenure, Department of Electrical Engineering and Computer Science, College of Engineering, is recommended for promotion to professor of information, with tenure, School of Information, and professor of electrical engineering and computer science, without tenure, Department of Electrical Engineering and Computer Science, College of Engineering.

Academic Degrees:

Ph.D.	2009	University of Illinois at Urbana-Champaign
B.S.	2003	Peking University, Beijing, China

Professional Record:

2014 – present	Associate Professor of Information, School of Information and Associate Professor of Electrical Engineering, and Computer Science, College of Engineering, University of Michigan
2009 – 2014	Assistant Professor of Information, School of Information and Assistant Professor of Electrical Engineering, and Computer Science, College of Engineering, University of Michigan
2008	Research Intern, Yahoo! Research
2007	Research Intern, Microsoft Research
2006	Research Intern, Microsoft Research

Summary of Evaluation:

Teaching: Professor Mei has a long record of superior teaching and mentoring. His evaluation scores are consistently high and his courses full. He also has a history of teaching innovation. He successfully pioneered the concept of in-class data science, which was very popular with the students. He also introduced the immensely popular “Mastery Course in Big Data Analytics.” The mastery courses are an integrative experience that is critical to our newly revised master’s curriculum where students synthesize what they have learned in their previous coursework, often working with real-world problems or data. Professor Mei’s mastery course is a model for this type of course. He has long been a leader in the data science areas at the undergraduate and graduate level and has played a lead role in the development of the curricula at both of those levels. More recently, he has led the creation of the new online Master of Applied Data Science degree which will launch next September.

Professor Mei is an excellent advisor and mentor who regularly publishes with his students at all levels. He is able to integrate students with a wide variety of skills and interests into his lab. Professor Mei has graduated five Ph.D. students; two have gone on to tenure-track academic positions (University of North Carolina-Chapel Hill, University of Cincinnati) and three into industry (Google (2) and Amazon). He currently has seven additional doctoral students who are making good progress to their degrees. Professor Mei has also served on 31 doctoral dissertation

committees and mentored 20 master's students in independent studies or master's theses. He has also worked with 10 undergraduate students from UM and various Chinese universities.

Research: Professor Mei's greatest impacts have come from developing unified approaches for computational reasoning about connected things that had previously been conceptualized or processed separately, such as texts and contexts, topics and sentiments, or relevance and diversity as objectives for an information retrieval system. He has also developed important techniques for lower-dimensional representations of large networks to enable machine learning (network embeddings) and more effective visualization for humans. Professor Mei's research contributions span several subfields of data science: information retrieval; data mining; machine learning; natural language processing; networks; social media analysis; and health informatics.

Both the quality and quantity of Professor Mei's research has been high, he has over 100 publications in top venues. These include prestigious Association for Computing Machinery (ACM) conferences, such as Knowledge Discovery and Data Mining (KDD), the International Conference on Machine Learning (ICML), The Web Conference (WWW), and the Special Interest Group on Information Retrieval (SIGIR) and top journals in several fields, including the *Journal of the American Medical Informatics Association*, the *ACM Transactions on Information Systems* and the *ACM Transactions on Knowledge Discovery from Data*, and the prestigious broad-based research journal *Proceedings of the National Academy of Sciences*. His research has also had a big scholarly impact, with more than twenty articles receiving 100+ citations and an h-index of 42 (Google Scholar as of January 16, 2019). His work has received best paper awards from the 2016 Web Search and Data Mining Conference, the 2014 International Conference on Machine Learning conference (out of more than 1200 submissions), and inclusion in the 2012 International Medical Informatics Association Yearbook of Medical Informatics which includes the most original, excellent state-of-the-art research in the area of health and biomedical informatics of the past year. In recognition of these achievements and his research and service in general, Professor Mei was selected as a Distinguished Member of the Association for Computing Machinery (ACM) in 2017; this designation recognizes those ACM members with at least 15 years of professional experience who have achieved significant accomplishments or have made a significant impact on the computing field.

Professor Mei has received 22 research grants amounting to \$18 million overall and \$4.5 million to the University of Michigan from a variety of sources including National Institutes of Health, the Defense Advanced Research Projects Agency, and the National Science Foundation. He was the principal investigator on nine of these grants.

Recent and Significant Publications:

Shan Jiang, Chengxiang Zhai, and Qiaozhu Mei, "Exploiting Knowledge Graph to Improve Text-based Prediction." *Proceedings of 2018 IEEE Conference on BigData. (Best Paper Nominee, 5 out of 518 submissions)*

Wei Ai, Roy Chen, Yan Chen, Qiaozhu Mei, and Webb Phillips. Recommending teams promotes prosocial lending in online microfinance. *Proceedings of the National Academy of Sciences*, 113(52):14944–14948, 2016. doi: 10.1073/pnas.1606085113.

Zhe Zhao, Paul Resnick, and Qiaozhu Mei. Enquiring minds: Early detection of rumors in social media from enquiry posts. *Proceedings of the 24th International Conference on World*

Wide Web, pages 1395–1405. International World Wide Web Conferences Steering Committee, 2015. (14% acceptance)

Jian Tang, Meng Qu, Mingzhe Wang, Ming Zhang, Jun Yan, and Qiaozhu Mei. Line: Large-scale information network embedding. *Proceedings of the 24th International Conference on World Wide Web*, pages 1067–1077. International World Wide Web Conferences Steering Committee, 2015. (14% acceptance) (Most cited paper of WWW'15)

Jian Tang, Zhaoshi Meng, XuanLong Nguyen, Qiaozhu Mei, and Ming Zhang. Understanding the limiting factors of topic modeling via posterior contraction analysis. *In International Conference on Machine Learning*, pages 190-198, 2014. (Best Paper Award)

Service: Professor Mei has served the School of Information in a wide variety of positions. He was on the school's original health informatics planning committee. He has also served on four of our five academic program committees: doctoral; the Master of Science in information; the Master of Health Informatics; and he currently directs the Master of Applied Data Science. He has also served on the Information Technology Strategy, Metrics, Search, Promotion and Tenure, and the Dean's Advisory committees. In addition to this large breadth and amount of service, most recently, he took on the chairmanship of the online degree task force, a very sizeable effort that was carried out in the span of just several months. The result was a design for an innovative online data science program that received faculty, university, and state approval. He was then asked to serve as the first program director for the new degree program.

Outside of the university, Professor Mei has also maintained a high level of service. He has been on the program committees of many of the major conferences in data mining, information retrieval, machine learning, and natural language processing. He is an editorial board member for three of the top journals in his field. He was also the general co-chair (along with UMSI associate professor Kevyn Collins-Thompson) of the Association for Computing Machinery (ACM) Special Interest Group on Information Retrieval (SIGIR) conference, the major conference in information retrieval, which brought more than 700 researchers to Ann Arbor in the summer of 2018.

External Reviewers:

Reviewer A: "It is eminently clear from Professor Mei's CV that is an internationally recognized and respected scholar and leader in not one, but in all of his fields of interest and application areas... I will conclude this letter of assessment more or less as I began it — by recommending most strongly that [Professor] Mei be promoted to the level of Professor with tenure. I am confident that he would be awarded the same here at [my institution]."

Reviewer B: "I believe he would easily achieve promotion at [my institution], as well as at any research intensive university in the United States or internationally. I have written perhaps a dozen letters for promotion from Associate Professor to full Professor, and his case is one of the obvious and straightforward that I can recall."

Reviewer C: "While an emphasis in his career lies on research in text and data mining, [Professor] Mei has much wider interests and contributed to a wide variety of topics that span the full breadth of data science. The research statement in the promotion package brings these

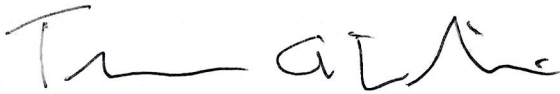
different interests together in a coherent and visionary line of research, with a lot of promise for future outcomes of this work, and with high value for society.”

Reviewer D: “In summary, [Professor Mei’s] research has been strong and broad, and he has had substantial impact on the field. Since tenure, his visibility and impact has increased substantially, and I see him picking up even more speed with no signs of slowing down. In my opinion, he has established himself as a leader at a level that more than sufficient for promotion to Full Professor.”

Reviewer E: “His work on identifying rumors from social media posts and on detecting emerging rumors in social media streams (2015) are widely considered to be pioneering contributions of using computational methods to fight online misinformation.”

Summary of Recommendation

Professor Mei’s accomplishments in the areas of teaching, research, and service meet and exceed the promotion requirements to achieve the rank of professor. Therefore, with the overwhelming support of the promotion and tenure committee of the School of Information and the College of Engineering, we enthusiastically recommend Qiaozhu Mei for promotion to professor of information, with tenure, School of Information, and professor of electrical engineering and computer science, without tenure, Department of Electrical Engineering and Computer Science, College of Engineering.



Thomas A. Finholt
Dean, School of Information



Alec D. Gallimore, Ph.D.
Robert J. Vlasic Dean of Engineering
College of Engineering

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