Approved by the **Regents** May 21, 2015

# PROMOTION RECOMMENDATION The University of Michigan

# College of Engineering

Department of Electrical Engineering and Computer Science

Qiaozhu Mei, assistant professor of electrical engineering and computer science, College of Engineering, is recommended for promotion to associate professor of electrical engineering and computer science, without tenure, College of Engineering [also associate professor of information, with tenure, School of Information].

### Academic Degrees:

Ph.D.	2009	University of Illinois, Computer Science, Urbana-Champaign
B.S.	2003	Peking University, Computer Science, Beijing, China
Professional Records		

Professional Record:	
2009 – present	Associate 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's contributions to classroom teaching have been substantial and valuable, with his greatest contributions coming in his courses aimed at Master's and Ph.D. students interested in technical content related to Data Mining, Information Analysis, and Information Retrieval. He has been active in improving and extending his teaching within his core area of expertise. Professor Mei's students have won international competitions and he is sought after as a member of dissertation committees. Professor Mei's expertise and mentorship is valued by students and colleagues in a variety of disciplines and other universities.

Professor Mei has been active as a graduate student mentor. At UM, he is the primary advisor for five current Ph.D. students and the co-advisor for a sixth. All of his doctoral students are fairly early in the program, with the first two expected to graduate in 2016. In addition to advising his own students, Professor Mei is highly sought after as a member of dissertation committees across the UM campus and nationally. He has served or is currently serving on nineteen dissertation committees (including the committees he is chairing or co-chairing): four in UMSI, ten in computer science and engineering, one in statistics, one in electrical and computer engineering, and three at other universities (two at the University of Illinois at Urbana-Champaign and one at Vanderbilt University).

Research: Professor Mei is a prolific and influential researcher in the areas of text mining, information retrieval, and health informatics. Within these areas, he has made significant contributions around three themes: 1) temporal text mining, 2) semi-supervised learning and ranking of unlabeled data to do clustering and classification, and 3) big data graph

representations and changes over time. What also distinguishes Professor Mei's work is his focus on real-world problems and data.

Professor Mei has published numerous articles in journals and in conferences. The total number of journal articles is eight. Of these, three are in the *Journal of the American Medical Informatics Association*, one in *Nucleic Acids Research*, one in *Information Retrieval*, one in *Proceedings of the Very Large Databases Endowment* (PVLDB), one in *Information Processing and Management*, and one in *ACM TKDD*. These are all highly prestigious journals in their respective fields of health informatics, bioinformatics, information retrieval and database systems. Of the journal proceedings, twenty-six are in highly prestigious conferences and another 13 papers in tier two conferences. He has also published more than 10 workshop papers and book chapters. Overall, Professor Mei has a total of 2,378 citations and an h-index of 25.

Professor Mei has thirteen research grants since coming to Michigan. These grants are from a variety of sources, such as the National Science Foundation, the National Institutes of Health, the Defense Advanced Research Projects Agency, Yahoo, and internally from UM. Professor Mei is highly collaborative in his research. His collaborations have given him access to data to which he would not otherwise have had access. Furthermore, his contributions to these research collaborations are apparent and his work added new perspectives and depth to the analysis in the resulting articles.

## Recent and Significant Publications:

- David A. Hanauer, Mohammed Saeed, Kai Zheng, Qiaozhu Mei, Kerby Shedden, Alan R. Aronson, and Naren Ramakrishnan, "Applying MetaMap to Medline for identifying novel associations in a large clinical dataset: a feasibility analysis," *Journal of the American Medical Informatics Association*, vol. 21, no. 5, pp. 925-937, 2014.
- Yukun Chen, Hongxin Cao, Qiaozhu Mei, Kai Zheng, and Hua Xu, "Applying active learning to supervised word sense disambiguation in MEDLINE," *Journal of the American Medical Informatics Association*, vol. 20, no. 5, pp. 1001-1006, 2013.
- Kai Zheng, Qiaozhu Mei, and David A. Hanauer, "Collaborative search in electronic health records," *Journal of the American Medical Informatics Association*, vol. 18, no. 3, pp. 282-291, 2011.
- Moushumi Sen Sarma, David Arcoleo, Radhika S. Khetani, Brant Chee, Xu Ling, Xin He, Jing Jiang, Qiaozhu Mei, ChengXiang Zhai, and Bruce Schatz, "BeeSpace Navigator: exploratory analysis of gene function using sematic indexing of biological literature," *Nucleic Acids Research*, vol. 39 (suppl 2), pp. W462-W469, 2011.

Service: Professor Mei has contributed greatly in service to the School of Information and the University. Professor Mei has co-founded the campus wide special interest group, Michigan Data Sciences (MIDAS) and co-organized the MIDAS seminar series. The series is on-going, and very well attended. The MIDAS group and other related efforts on campus are being rolled into a Michigan Institute of Data Science, and Professor Mei is a founding member, serving on the steering committee. Externally, Professor Mei has served on the program committees of all the major conferences in his field and has served as area chair for a few conferences as well as on National Science Foundation panels.

#### External Reviewers:

Reviewer A: "..., I enthusiastically recommend [Professor] Mei for promotion. He is one shining gem that any top research institution would love to hire and keep."

Reviewer B: "[Professor Mei] is very dedicated, productive, effective, and has very strong capability at innovative research."

Reviewer C: "[Professor Mei] has a solid track record of external grants and professional services. Considering the difficulty of securing funding in recent years, obtaining many federal grants is phenomenal. I believe that [Professor Mei] is definitely a rising star in the field."

Reviewer D: "..., Professor Mei has made important and deep contributions to a wide range of problems. His work is having significant impact among his peers."

Reviewer E: "[Professor Mei] has an outstanding record of high quality scientific output, and a strong interest and ability to push for developing state-of-the-art machine learning methodologies in various applications."

#### Summary of Recommendation

Professor Mei is an exceptional researcher with achievements and contributions recognized and highly praised by eminent scholars, an excellent educator and mentor, and an outstanding citizen in service. It is with the support of the College of Engineering Executive Committee that I recommend Qiaozhu Mei for promotion to associate professor of electrical engineering and computer science, without tenure, College of Engineering.

David C. Munson, Jr.

Robert J. Vlasic Dean of Engineering

College of Engineering

Jeffrey K. MacKie-Mason

Arthur W. Burks Collegiate Professor of Information and Computer Science,

Professor of Footnomics and Public Police

Professor of Economics and Public Policy,

and Dean, School of Information