Approved by the Regents
May 16, 2019

PROMOTION RECOMMENDATION
The University of Michigan
College of Engineering
Department of Electrical Engineering and Computer Science

Barzan Mozafari, assistant professor of electrical engineering and computer science, Department of Electrical Engineering and Computer Science, College of Engineering, is recommended for promotion to associate professor of electrical engineering and computer science, with tenure, Department of Electrical Engineering and Computer Science, College of Engineering.

Academic Degrees:

Ph.D.	2011	University of California Los Angeles, Computer Science, Los Angeles, CA
M.S.	2008	University of California Los Angeles, Computer Science, Los Angeles, CA
B.S.	2006	Shahid Beheshti University, Computer Engineering, Tehran, Iran

Professional Record:

2017 – 2018	Morris Wellman Assistant Professor, Department of Electrical Engineering and Computer Science, University of Michigan
2013 – present	Assistant Professor, Department of Electrical Engineering and Computer Science, University of Michigan
2011 – 2013	Post-Doctoral Associate, Computer Science and Artificial Intelligence Laboratory, Massachusetts Institute of Technology, Cambridge, MA

Summary of Evaluation:
Teaching: Professor Mozafari has taught one large undergraduate and two graduate courses in the general area of database design and implementation. One graduate course is a new offering he has developed, and he has significantly revised the other two. His teaching ratings are consistently high. Student letters support his teaching effectiveness and enthusiasm. He is accessible and patient in helping students achieve at the highest possible level. Professor Mozafari has graduated one Ph.D. student as the co-chair and currently chairs four Ph.D. students, with two expected to graduate this year. In addition, he has supervised 12 undergraduate major projects and is mentoring a post-doctoral scholar.

Research: Professor Mozafari's primary research area is Approximate Query Processing (AQP), in which he has established clear leadership and made fundamental contributions. He has also tackled the problem of tail latency in large-scale query systems, leading to systems that achieve superior responsiveness by scheduling queries with an understanding of both variance and contention. Professor Mozafari's publications consistently appear in the most prestigious venues for data management, and he has generated rich collaborations that have produced results in several adjacent areas. His scheduling work has been adopted by a number of vendors, including Oracle in their MySQL product. He has been successful in obtaining funding from a variety of government and industry sources, including through an NSF CAREER Award. His work has been recognized with Best Paper Awards, and he was appointed as the Morris Wellman Faculty Development Assistant Professor from 2017 to 2018.

Recent and Significant Publications:

Jarrid Rector-Brooks, Jun-Kun Wang, Barzan Mozafari, "Revisiting Projection-Free Optimization For Strongly Convex Constraint Sets," *AAAI*, 2019.
Dong Young Yoon, Mosharaf Chowdhury, Barzan Mozafari, "Distributed Lock Management with RDMA: Decentralization without Starvation," *ACM SIGMOD*, 2018.
Yongjoo Park, Barzan Mozafari, Joseph Sorenson, Junhao Wang, "VerdictDB: Universalizing Approximate Query Processing," *ACM SIGMOD*, 2018.
Yongjoo Park, Ahmad Shahab Tajik, Michael Cafarella, Barzan Mozafari, "Database Learning: Toward a Database that Becomes Smarter Every Time," *ACM SIGMOD*, 2017.
Dong Young Yoon, Ning Niu, Barzan Mozafari, "DBSherlock: A Performance Diagnostic Tool for Transactional Databases," *ACM SIGMOD*, 2016.

Service: Professor Mozafari has served on the Computer Science and Engineering Division's graduate admissions committee, and the management committee of the campus-wide Michigan Institute for Computational Discovery and Engineering. He has served on the program committees of nearly every major conference in his research area and has chaired or co-chaired a number of conferences and workshops, demonstrating a sustained commitment to and influence on the data management community.

External Reviewers:
Reviewer A: "Dr. Mozafari's excellent research work has been recognized worldwide, especially his work in the area of systems-oriented approximate query processing (AQP, for short). One of his earlier papers…is the bible in this field, and is standard reading for all researchers and students in the area of systems-oriented AQP."

Reviewer B: "Barzan has been at the forefront of leading the research effort to make AQP practical. ... With his proven record, bold ambitions, and strong drive, Barzan will play an important role in our field of database systems for years to come."

Reviewer C: "Dr. Mozafari has established himself as an outstanding researcher [of his cohort] and a rising star in a short duration of time. ... his work easily surpasses the requirements for tenure at my institution, and I have no doubt that he would be promoted at my institution."

Reviewer D: "In my opinion he is an internationally renown and leading researcher, world-wide, in the areas of large-scale data management and database systems. ... Dr. Mozafari publishes consistently at the most selective venues of our filed, such as SIGMOD, VLDB/PVLDB, and ICDE. ... Dr. Mozafari has a strong and vibrant research group and is actively supervising and engaging graduate and undergraduate students."

Reviewer E: "… Prof. Mozafari is the recognized leader of his academic generation in approximate query processing …"

Reviewer F: "Prof. Mozafari is the definite leader in the area of approximate query processing in his age group … He definitely deserves tenure and promotion at your highly-esteemed university. He would definitely get tenure at [my institution]"

Reviewer G: "Barzan is clearly among the best of his generation. ... In my opinion, he would (and should) be granted tenure at any university in the world. ... His name frequently comes up in best-in-the-area discussions."

Summary of Recommendation: Professor Mozafari has established a high-impact record of teaching, scholarly research, and service at the University of Michigan. It is with the support of the College of Engineering Executive Committee that I recommend Barzan Mozafari for promotion to associate professor of electrical engineering and computer science, with tenure, Department of Electrical Engineering and Computer Science, College of Engineering.

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

May 2019