# PROMOTION RECOMMENDATION The University of Michigan-Dearborn

College of Engineering and Computer Science

Brahim Medjahed, associate professor of computer and information science, with tenure, Department of Computer and Information Science, College of Engineering and Computer Science, is recommended for promotion to professor of computer and information science, with tenure, College of Engineering and Computer Science.

#### Academic Degrees:

Ph.D.	2004	Computer Science, Virginia Tech, USA
M.S.	1995	Computer Science, Algiers University of Science and Technology,
		Algeria
Ing <b>é</b> niorat	1991	Computer Science, Algiers University of Science and Technology,
		Algeria

#### Professional Record:

2010 – present	Associate Professor, University of Michigan-Dearborn, MI
2004 - 2010	Assistant Professor, University of Michigan-Dearborn, MI
1995 – 1999	Lecturer, Algiers University of Science and Technology, Algeria

### Summary of Evaluation:

Teaching: Professor Medjahed is rated excellent in teaching. He is an outstanding educator who has established an excellent record in all aspects of teaching including classroom instruction, curriculum, laboratory development, and student mentorship. He has taught a wide range of undergraduate and graduate courses at all levels. His teaching evaluations by students consistently placed him among the top few in the department. He has been instrumental in curriculum development and revitalization at both undergraduate and graduate levels. He developed five new courses (three since last promotion) including one multi-disciplinary course on STEM education with colleagues from two other colleges at UM-Dearborn. He highly values the student success, which is exemplified by his efforts in implementing effective instructional methods, holding useful tutorial sessions for his students, adopting open door academic advising, and engaging undergraduates in research and other academic activities. His research with undergraduates was showcased in different media outlets at the college level, campus level, as well as local and national media. Two undergraduate projects under his supervision won competitive awards at two mobile apps challenge events and were considered as "examples of innovation at the University of Michigan." He also spent tremendous time in advising and helping a large number (over 100 per year) graduate students at various stages as chair of several departmental graduate committees.

Research: Professor Medjahed is rated significantly capable in research. His primary research interests include web service, data integration, semantic web, service computing, and privacy. He published 31 journal papers (15 since last promotion) including 10 in IEEE/ACM transactions, 5 in flagship IEEE/ACM journals, and 3 in the *VLDB Journal* (2 were ranked among the most cited articles in the journal). He also published 39 conference papers (20 since last promotion) including many in top-tier conferences and 2 books by Springer (both after last promotion). He won 2 best paper awards in reputable venues. His research is highly cited; he has made significant contributions to his research areas. He has successfully secured research funding from various sources including

NSF, industry and university. His collaboration with local industry is a good indicator of the relevance of his research to the real-world applications. He also participated in STEM education research. Along with faculty from other units at UM-Dearborn, he conducted an exploratory NSF-funded research to examine the impact of a collaborative inquiry- and design-based afterschool program on urban high school students' STEM learning.

## Recent and Significant Publications:

- Rezgui, N. Davis, Z. Malik, B. Medjahed, H. Soliman. CloudFinder: A System for Processing Big Data Workloads on Volunteered Federated Clouds. *IEEE Transactions on Big Data*. Accepted.
- K. Hashmi, A. Alhosban, Z. Malik, and B. Medjahed. A Web Service Negotiation Management and QoS Dependency Modeling Framework. *ACM Transactions on Management Information Systems*, 7(2), Article 5, May 2016.
- Z. Malik, B. Medjahed, A. Rezgui. sCARE: Reputation Estimation on Uncertain Web Services. ACM Transactions on Internet Technology, 16(1): Article 7, February 2016.
- I. Benamor, S. Benbernou, M. Ouziri, Z. Malik, B. Medjahed. Discovering Best Teams for Data Leak aware Crowdsourcing in Social Networks. *ACM Transactions on the Web*, 10(1): Article 2, February 2016.
- S.E. Tbahriti, C. Ghedira, B. Medjahed, M. Mrissa. Privacy-Enhanced Web Service Composition. *IEEE Transactions on Services Computing*. 7(2), pp. 210 222, June 2014.

Service: Professor Medjahed is rated excellent in service. He has made outstanding service contributions to the university community and has served on numerous committees at all the levels at UM-Dearborn. At the department level, he served on important committees including ones for undergraduate curriculum, ABET preparation, graduate programs, new program development, program assessment, faculty search, and academic advising; at the college level, he served on committees including executive committee, college-wide graduate committee, department chair search, open houses, P&T criteria committee, and casebook committees; at the campus level, he served on committees including Vision 2020 steering committee, UCDC graduate subcommittee, advisory board of the hub of teaching and learning, and various campus-wide award committees. He has also demonstrated excellent leadership in his services. He chaired/co-chaired five department committees and three college committees. In the professional community, he has also been very active. He served as a program committee member for over 120 conferences (64 since last promotion). He served as a program/track/tutorial/publicity chair for seven conferences. He served on the editorial boards of two journals and as a guest editor for a top-tier journal in his field. He also reviewed papers for numerous journals and grant proposals for different funding sources including NSF.

#### External Reviewers:

Reviewer A: "Dr. Medjahed's research output has shown large impact on the Service Computing field, as seen from high citation counts... Dr. Medjahed's research contributions have been substantial and impactful, and with his new role as chair of the Ph.D. program, it is expected that his research will be sustained and deepen to yield more high quality research."

Reviewer B: "Dr. Brahim has clearly established himself as a leader in the area of service computing. He has an impressive publication record that is going on an upward trajectory. He has supervised numerous master and undergraduate students, and has an impressive service record... It

is impressive that Dr. Brahim is consistently keeping his standard of such publications to the extent that 100% of his journal publications over the last three years are first-tier ones."

Reviewer C: "I am impressed with the number and quality of his publications, which include several from the IEEE and ACM transactions... I am fully impressed with his ability to maintain an active research program with undergraduates and MS students; he appears to be a key member of your department's transition to a full Ph.D. program of its own."

Reviewer D: "In terms of quality, four of them have been published in ACM journals and this is considered to be very difficult as they have very high standards... Looking at the quantity, his publications list demonstrates a regular publishing pattern, which demonstrates that he has been very active researcher for over 16 years... The scholarly impact of his paper is demonstrated by a very high number of citations (over 3,000) and impact factor (H-index is 22), particularly in the areas of web service composition, managing trust and recovery in service-oriented systems."

Reviewer E: "Dr. Medjahed has been actively investigating various issues in service computing such as service composition, quality of service, fault detection and management, privacy preservation, and reputation estimation... Many of his journal papers have been published in highly reputable ACM and IEEE journals... Overall, I think Dr. Medjahed's papers are of high quality. ... Dr. Medjahed has been active in grant writing with several funded grants in various roles... In terms of professional and departmental services, he has served on many conference committees and advised a large number of students (2 PhD students and 73 MS research students). He has also been chair of the MS CIS Graduate Committee... In summary, Dr. Medjahed has demonstrated a very solid record in research, funding and service."

# Summary of Recommendation:

Professor Medjahed has demonstrated a strong record in education, research, service and leadership, and made important contributions to the mission of UM-Dearborn. We are pleased to recommend, with strong support of the College of Engineering and Computer Science Executive Committee, Brahim Medjahed for promotion to professor of computer and information science, with tenure, Department of Computer and Information Science, College of Engineering and Computer Science.

Anthony W. England, Dean

College of Engineering and Computer Science

Daniel Little, Chancellor

University of Michigan-Dearborn