

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

Approved by the Regents
May 20, 2010

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

Academic Degrees:

Ph.D. 2000	Tsinghua University, Electrical Engineering, Beijing, China
M.S. 1996	Tsinghua University, Electrical Engineering, Beijing, China
B.S. 1988	University of Electronic Science and Technology of China, Electrical Engineering, Chengdu, China

Professional Record:

2004 – Present	Assistant Professor, Department of Electrical and Computer Engineering, University of Michigan-Dearborn
1999 – 2004	Research Scientist/Postdoctoral Research Fellow, Department of Electrical Engineering, Georgia Institute of Technology, Atlanta, Georgia
1993 – 1999	Research Assistant, Department of Electrical Engineering, Tsinghua University, Beijing, China

Summary of Evaluation:

Teaching: Professor Xiang's teaching is rated as significantly capable. He is devoted to teaching, attentive to students' concerns and always available to students. Since joining the department, Professor Xiang has taught five different courses (three graduate classes, and two undergraduate), directed two MS theses, and supervised seven senior capstone projects and 11 student projects. In addition, he has supervised six postdoctoral researchers and one visiting PhD student. Professor Xiang has made significant effort to improve his English proficiency. He took more than two teaching training workshops offered by CRLT at the University of Michigan in Ann Arbor and enhanced English skills with his tutors. Since he started, his teaching evaluations by students have improved significantly. The teaching evaluations he received in Winter 2009 were excellent: he received 3.64/4 and 4.0 from all distance learning students. The average rating of the ECE instructors for the same semester was 3.3

Research: Professor Xiang's research is rated excellent. Since joining the ECE department, he has published 13 journal papers and ten conference papers. His primary research interest is in communications systems and networks, wireless communications and vehicular networks. His research excellence has been recognized by his peers in the same field. His papers were published primarily in key journals such as *IEEE Transactions on Wireless Communications* and *IEEE Journal of Selected Areas in Communications*. He is particularly effective at collaborative research. He has worked with colleagues within and outside the department and in other universities. As PI, Professor Xiang has raised over \$310,000 in research funding from highly competitive funding sources such as NSF. He served as co-PI on a number of funded research

projects including a NSF MRI grant and a research contract from DoD TARDEC. In addition Professor Xiang received grants from Rackham, OVPR, CEEP and IAVS.

Recent and Significant Publications:

- T. Luo, T. Jiang, W. Xiang, and H. Cheng, "A subcarriers allocation scheme for cognitive radio systems based on multi-carrier modulation," *IEEE Trans. Wireless Commun.*, vol. 7, pp. 3335-3340, Sept. 2008.
- T. Jiang, M. Guizani, H.-H. Chen, W. Xiang, and Y. Wu, "Derivation of PAPR distribution for OFDM wireless systems based on extreme value theory," *IEEE Trans. Wireless Commun.*, vol. 7, pp. 1298-1305, Apr. 2008.
- W. Xiang, P. Richardson, C. Zhao, and S. Mohammad, "Automobile brake-by-wire control system design and analysis," *IEEE Trans. Veh. Technol.*, vol. 57, pp. 138-145, Jan. 2008.
- J. Guo and W. Xiang, "Reinforce networking theory with OPNET simulation," *J. Inf. Technol. Edu. (JITE)*, 2008.
- T. Jiang, W. Xiang, P. Richardson, J. Guo, and G. Zhu, "PAPR reduction of OFDM signals using partial transmit sequences with low computational complexity," *IEEE Trans. Broadcast.*, vol. 53, pp. 719-724, Sept. 2007.
- T. Jiang, W. Xiang, H. Chen, and Q. Ni, "Multicast broadcasting services support in OFDMA-based WiMax systems," *IEEE Commun. Mag.*, vol. 45, pp. 78-86, Aug., 2007.
- T. Jiang, W. Xiang, P., D. Qu, and G. Zhu, "On the nonlinear companding transform for reduction in PAPR of MCM signals," *IEEE Trans. Wireless Commun.*, vol. 6, pp. 2017-2021, Jun. 2007.

Service: Professor Xiang's service is rated excellent. He has an exceptional professional service record. He served on editorial boards for five journals, 12 conference committees, and as session chairs for five conferences. He also delivered four tutorials at professional conferences. This is a very impressive record for a junior faculty. He actively participates in department activities such as annual campus open house, department meetings and ABET assessment.

External Reviewers:

Reviewer A: "Dr. Xiang's scholarship accomplishments have been significant as exhibited by both the quantity and quality of his publications."

Reviewer B: "Based on Dr. Xiang's publications and funding record, I would rate him highly among his peers, although I do not have a percentage number to quantify this."

Reviewer C: "Besides his technical work, Dr. Xiang has made significant contributions to professional organizations."

Reviewer D: "Overall Dr. Xiang has very strong research program and scholarly impact in the field."

Reviewer E: "He has worked in strategically important areas, has made significant systems contributions, and I expect that his work will ultimately help bring recognition to the University of Michigan-Dearborn."

Reviewer F: "I think Dr. Xiang is quite well considered and is having a strong impact in the automotive communications research community. I think his physical layer and experimental contributions are well regarded by the community."

Reviewer G: "Dr. Xiang's publication record is really outstanding, in terms of the amount of work he has been able to produce, and more importantly the quality and impact of the work."

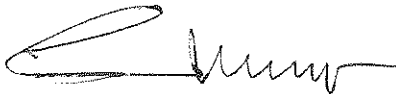
Reviewer H: "I will put Professor Xiang's standing in the top tier among his peer group who are working in the same field. He is a very promising scholar, researcher and responsible educator."

Reviewer I: "Dr. Xiang's publications are sound, timely, and useful to other researchers."

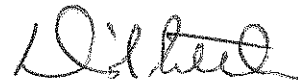
Reviewer J: "Dr. Weidong Xiang has many excellent technical papers published in the well-known professional journals in our research field. He has made a lot of scientific and engineering contributions to theories, practice and real systems."

Summary of Recommendation:

Professor Xiang is a good teacher and an excellent research scholar. His service to the department and to the professional community is excellent. We are pleased to recommend, with the strong support of the College of Engineering and Computer Science Executive Committee, Weidong Xiang for promotion to associate professor of electrical and computer engineering, with tenure, Department of Electrical and Computer Engineering, College of Engineering and Computer Science.



Subrata Sengupta
Dean
College of Engineering and Computer Science



Daniel Little
Chancellor
University of Michigan-Dearborn

May 2010