

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

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

Academic Degrees:

Ph.D.	2013	Electrical Engineering, North Carolina State University, Raleigh, NC
M.S.	2009	Electrical Engineering, Virginia Tech, Blacksburg, VA
B.S.	2008	Electrical Engineering, Clarkson University, Potsdam, NY

Professional Record:

2022-present	Interim Chair, Electrical and Computer Engineering, University of Michigan-Dearborn
2019-present	Associate Professor, Electrical and Computer Engineering, University of Michigan-Dearborn
2018-2019	Adjunct Professor, Electrical Engineering and Automation, Fuzhou University
2013- 2019	Assistant Professor, Electrical and Computer Engineering, University of Michigan-Dearborn

Summary of Evaluation:

Teaching: Professor Su is an excellent teacher. He has taught seven different lecture/lab courses in electrical engineering and developed a new graduate course since his last promotion. He makes use of interactive in-class discussions as well as team-based exercises to keep students motivated and engaged. His teaching evaluations remain high for both graduate and undergraduate courses. In addition to direct engagement with students, Professor Su led recent efforts to create new stackable graduate certificate programs in electrical power engineering as well as to revamp two courses in electrical engineering. Professor Su is also an excellent mentor, with nine post-doctoral research fellows, four visiting professors, two research associates, 12 PhD students, nine non-thesis master students, undergraduate senior design teams including more than 30 undergraduate mentees, and several independent study course projects including more than 20 undergraduate mentees.

Research: Professor Su, 2021 recipient of the Distinguished Research Award at the University of Michigan-Dearborn, has a research program that centers on power and energy systems, transportation electrification, machine learning applications, and cyber-physical systems. He has written more than 70 research papers published or accepted for publication in prestigious international journals, 39 of which were published within the past three years. Professor Su's research work has been cited 5,834 times with an h-index of 38 and i10-index of 76.

In addition to being a prolific and impactful scholar, Professor Su has worked on more than 20 sponsored research programs totaling more than \$4 million since joining UM-Dearborn in 2013. More than \$2.6 million of that funding he obtained in the past three years. His funding portfolio includes industry and government collaborations.

Recent and Significant Publications:

- V. Bui and W. Su, “A Dynamic Internal Trading Price Strategy for Networked Microgrids: A Deep Reinforcement Learning Based Game-Theoretic Approach,” *IEEE Trans. on Smart Grid*, 2022.
- F. Chang, X. Cui, M. Wang, and W. Su, “Region of Attraction Estimation for DC Microgrids with Constant Power Loads Using Potential Theory,” *IEEE Trans. on Smart Grid*, vol.12, no.5, pp.3793-3808, September 2021.
- F. Chang, X. Cui, M. Wang, W. Su, and A.Q. Huang, “Large-Signal Stability Criteria in DC Power Grids with Distributed-Controlled Converters and Constant Power Loads,” *IEEE Trans. on Smart Grid*, vol.11, no.6, pp.5273-5287, November 2020.
- W. Su, J. Wang and J. Roh, “Stochastic Energy Scheduling in Microgrids with Intermittent Renewable Energy Resources,” *IEEE Trans. on Smart Grid*, vol.5, no.4, pp.1876-1883, July 2014.

Service: Professor Su’s service portfolio is as rich as his research funding. Beginning Fall 2022, he serves as the interim chair of the Department of Electrical and Computer Engineering. Even prior to becoming interim chair, he engaged in a variety of internal service work at the department, college, and university levels. Professor Su is also active in the community promoting education and the university on committees and task forces. He advises two student organizations. He is also active in external service including consulting on tech transfers, advising government and private sectors. He serves as a reviewer for professional journals and is a member of several professional associations.

External Reviewers:

Reviewer A: “His area of research, specialty power systems and their power electronics, is very relevant, up to date, and a growing field of research and technical development. This field has been maturing in the US and around the world and is destined to make great contributions to the smart and sustainable use of electric power on the planet.”

Reviewer B: “On average, his annual funding number more than doubles his tenure track period. Moreover, his funding record shows a good balance between federal competitive grants and private sector support. This is...strong evidence that he has already established a robust research program under today’s dynamic political and economic climate.”

Reviewer C: “His total citation is nearly 6000 and his h-index is 38. In particular, I am quite impressed by his prize-winning paper ‘Stochastic Energy Scheduling in Microgrids with Intermittent Renewable Energy Resources,’ published in 2014, which has been cited more than 705 times. This is a very high number of citations for a single paper in our field of electric power.”

Reviewer D: “Dr. Su’s research productivity has been evidenced by the quantity and quality of scholarly publications. Since his last tenure promotion in 2019, Dr. Su has had 37 new journal publications (over 12 journal publications per year), of which he is the corresponding author of 30 journal publications. It highlights Dr. Su’s direct involvement in those publications. Dr. Su’s original contributions have been well-received by the scientific community.”

Reviewer E: “[Dr. Su] is an outstanding researcher with extraordinary abilities to work with other technical investigators. As a university scholar, he has made seminal and significant contributions to the field of electric power systems, continues to conduct complex and original research, and works closely with his students and colleagues in.”

Reviewer F: “Dr. Su’s professional growth and achievement since his last promotion are clearly visible, and I have no doubt that he will continue to be very successful in the years to come. Dr. Su has established an excellent track record and his work has demonstrated a high level of impact....”

Summary of Recommendation: Professor Su is an impactful and productive scholar, a lead research fundraiser, and an excellent community member who has made significant contributions to the field of power engineering. He is an excellent teacher and mentor; and he is a leader who contributes both in external and internal service. It is with the support of the College of Engineering and Computer Science Executive Committee that I recommend Wencong Su for promotion to professor of electrical engineering and computer science, with tenure, Department of Electrical and Computer Science, College of Engineering and Computer Science.



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Ghassan Kridli, Dean  
College of Engineering and Computer Science



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Domenico Grasso, Chancellor  
University of Michigan-Dearborn

May 2023