

**THE UNIVERSITY OF MICHIGAN  
REGENTS COMMUNICATION**

**PROMOTION RECOMMENDATION**

University of Michigan-Flint  
College of Arts and Sciences  
Department of Computer Science, Engineering Science and Physics

Stephen W. Turner, assistant professor of computer science, Department of Computer Science, Engineering Science and Physics, College of Arts and Sciences, is recommended for promotion to associate professor of computer science, with tenure, Department of Computer Science, Engineering Science and Physics, College of Arts and Sciences.

Academic Degrees:

Ph.D.	1995	Michigan State University
M.S.	1989	Michigan State University
B.S.	1987	Western Michigan University

Professional Record:

2000 to present	Assistant Professor, Computer Science, University of Michigan-Flint
1997 to 2000	Assistant Professor, Computer Science, Saginaw Valley State University
1996 to 1997	Visiting Assistant Professor, Computer Science, Michigan State University
1995 to 1996	Systems Analyst, Ford Motor Company
1989 to 1995	System/Network Administrator, Michigan State University
1988 to 1989	Teaching Assistant, Computer Science, Michigan State University

Summary of Evaluation:

**Teaching** – Dr. Turner has successfully taught a wide range of courses, introduced new courses, and extensively revised existing courses. He provides ample opportunities for learning, and employs Blackboard and maintains a web page for each course to ensure that materials are readily accessible on a round-the-clock basis. Peer and student evaluations attest that he is a clear, knowledgeable, well organized, and effective instructor. Not only did Dr. Turner readily become successful teaching here, he also continues to improve and develop. He is also a highly regarded advisor of students.

**Research** – Dr. Turner's primary research interest is computer networking. His participation in conferences, specializing in wireless networks, has resulted in several refereed publications, including "Channel Changing Heuristics In Ad Hoc Networks With Varying Traffic Demands," *Proceedings of the 2005 International Conference On Wireless Networks (ICWN-05)*, June 2005. He has actively involved computer science majors in his research efforts. They presented their work at the 2004 Meeting of Minds.

#### Recent and Significant Publications:

- Turner, Stephen. "Channel-Changing Heuristics in High-Mobility Ad Hoc Networks With Varying Traffic Demands," in *Proceedings of the 2005 International Conference On Wireless Networks* (ICWN-05), June 2005.
- Turner, Stephen. "Use of Multiple Channels To Improve Performance In Ad Hoc Networks," in *Proceedings of the 6th World Wireless Congress* (WWC 2005), May 2005.
- Turner, Stephen. "Channel-Changing Strategies To Preserve Bandwidth Of Flows In Ad Hoc Networks," in *Proceedings of the 2004 International Conference on Wireless Networks* (ICWN-04), July 2004.
- Turner, Stephen, Ci, Song and Sharif, Hamid. "A Novel Scheme For Improving Good Throughput Performance in Wireless Local Area Networks," in the *58th IEEE Semiannual Vehicular Technology Conference* (VTC2003), December 2003.
- Turner, Stephen, Ci, Song and Sharif, Hamid. "An Energy-Efficient TCP Quick Timeout Scheme For Wireless LANs," in *Proceedings of the 22nd International Performance, Computing, and Communications Conference* (IPCCC 2003), April 2003.
- Turner, Stephen, Ni, L. M. and Cheng, B. H. C. "A Scheduling Facility For a Network of Workstations," in *HPC Asia '95*, September 1995.
- Turner, Stephen, Ni, L. M. and Cheng, B. H. C. Time and/or Space Sharing In a Workstation Cluster Environment," in *Proceedings of Supercomputing '94*, November 1994. Recipient of Student Paper Award.
- Turner, Stephen, Ni, L. M. and Cheng, B. H. C. "Contention-Free 2D-Mesh Cluster Allocation in Hypercubes," in *IEEE Transactions on Computers*, pp. 1051-1055, August 1995.

**Service** – Dr. Turner has extensive work in program development and revision, has served on several search committees, and a number of important College or university committees, including the College of Arts and Sciences Nominating Committee, the Technology Committee and the Committee on the Economic Status of the Faculty.

#### External Reviewers:

##### Reviewer (A)

"I would place my rating in the 'strongest recommendation' category, with no uncertainty. In considering other cases I have known at high quality, comparable institutions with an undergraduate and teaching emphasis, I rate Professor Turner's work to be in the top 5%."

##### Reviewer (B)

"He has published five papers over the past three years in peer review conferences. I have read through his papers; they are of good quality." ... "Based on his past record and current progress, I will not be surprised if he accomplishes more exceptional work in the near future."

##### Reviewer (C)

"Dr. Turner's main research is in the areas of parallel and distributed computing and computer networks. He has published nine papers in various conferences and journals in these fields. Among them IEEE Transactions on Computers is a very selective journal."

Reviewer (D)

"Connection-free 2D-mesh cluster allocation in hypercubes ... addresses a very difficulty and practical problem in parallel computing. The extended work of this paper from MSU, a 3-D solution, has influenced the design of IBM Blue Gene/L, the fastest computer in the world today."

Reviewer (E):

"Two qualities strike me above all in Dr. Turner's scholarly work in this area. One is its clarity, an unusual capacity to think through complex problems involving multiple layers of the network protocol stack and to present solutions in a way that is accessible and illuminating. The other is vision, an ability to envisage and realize the further implications and applications of the proposed solutions."

Summary of Recommendation:

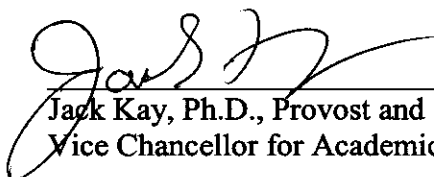
Dr. Turner has established a fine and improving teaching record at the University of Michigan-Flint, has a solid record as a scholar, and extensive service to his department, the College and university. He is an excellent colleague who shows great promise. We therefore enthusiastically recommend Stephen W. Turner to the title of associate professor of computer science, with tenure, Department of Computer Science, Engineering Science and Physics, College of Arts and Sciences.



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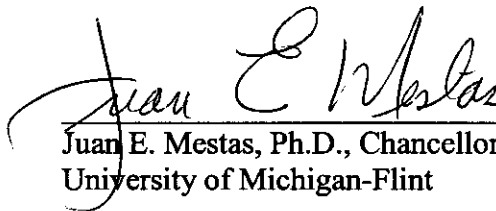
D. J. Trela, Ph.D., Dean  
College of Arts and Sciences

Recommendation endorsed by:



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Jack Kay, Ph.D., Provost and  
Vice Chancellor for Academic Affairs



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Juan E. Mestas, Ph.D., Chancellor  
University of Michigan-Flint

May 2006