

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

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

Academic Degrees:

Ph.D.	2007	DePaul University, Chicago, Illinois
M.Sc.	1996	DePaul University, Chicago, Illinois
M.B.A.	1992	Illinois Institute of Technology, Chicago, Illinois
B.A.	1991	Marmara University, Goztepe, Istanbul, Turkey

Professional Record:

2006 – Present	Assistant Professor of Computer Science, College of Arts and Sciences, University of Michigan-Flint
1998 – 2006	Adjunct Faculty, DePaul University, Chicago, Illinois
1997 – 1998	Instructor, Illinois Institute of Technology, Chicago, Illinois

Summary of Evaluation:

Teaching – Professor Uludag has taught students ranging from beginning undergraduate through the graduate level and achieved strong positive results from peers and students. He is a committed advisor of students, is actively engaged in assessment efforts and has devised a winning, thoughtful pedagogy.

Research – Professor Uludag has over 20 refereed publications and refereed conference proceedings. More than half of these have appeared since his arrival at UM-Flint in 2006. External reviewers praise the innovativeness, quality and impact of his research in quality of service routing and networking. Work in progress promises well for substantial future productivity.

Recent and Significant Publications:

Refereed Publications:

Uludag, S., Karakus, M., and Turner, S. W. “Implementing it0/cs0 With Scratch, App Inventor for Android, and Lego Mindstorms,” *Proceedings of the 2011 ACM Conference on Information Technology Education, SIGITE ‘11*, ACM. 2011.

Uludag, S., Akkaya, K., and Imboden, T. “A Taxonomy and Evaluation for Developing 802.11-Based Wireless Mesh Network Testbeds,” *Wiley International Journal of Communication Systems*. 2011.

Uludag, S. “Information and Networking Infrastructure of the Smart Grid,” Tutorial to be delivered at IEEE ICCCN 2011 Conference in Hawaii, <http://icccn.org/icccnll/tutorials.html>. July 2011.

- Uludag, S. and McBride, B. "Teaching Networking Concepts Through Bluetooth Software Implementation," *Frontiers in Education Conference (FIE)*, 2010 IEEE, pp. F4F-1 -F4F-2. October 2010.
- Uludag, S., Akkaya, K., Senel, F., and Thimmapuram, A. "Distributed Recovery From Network Partitioning in Movable Sensor/Actor Networks Via Controlled Mobility," *IEEE Transactions on Computers*, vol. 59, pp. 258 -271. February 2010.
- Uludag, S., Uludag, Z., Nahrstedt, K., Lui, K. S., and Baker, F. "A Laplace Transform-Based Method to Stochastic Path Finding," *IEEE ICC 2009 QoS and Modelling Symposium*, (Dresden, Germany). June 2009.
- Uludag, S. and Akkaya, K. "Distributed Channel Assignment in Wireless Mesh Networks With Guaranteed Connectivity," *Local Computer Networks, 2008. LCN 2008. 33rd IEEE Conference on*, pp. 562-563. October 2008.
- Uludag, S., Uludag, Z., Howell, A., Baker, F., and Lui, K. S. "Stochastically Guaranteed Routing For Additive Link Metrics With Unknown Distributions," *Quality of Service, 2008. IWQoS 2008. 16th International Workshop on*, pp. 199-203. June 2008.
- Uludag, S., Akkaya, K., Thimmapuram, A., and Senel, F. "Distributed Recovery of Sensor Failures in Wireless Sensor and Actor Networks," *Wireless Communications and Networking, 2008. WCNC 2008. 2003 IEEE*. April 2008.
- Uludag, S., Perkovic, L., Kashkanova, A., and Akkaya, K. "Quality-of-Service Provisioning Via Stochastic Path Selection Under Weibullian Link Delays," in *ACM QShine 2007*, (Vancouver, BC, Canada). August 2007.
- Uludag, S., Tam, W. Y., Lui, K. S., and Nahrstedt, K. "Quality-of-Service Routing With Path Information Aggregation," *Elsevier Comput. Networks*, vol. 51, no. 12, pp. 3574-3594. 2007.
- Uludag, S., Lui, K. S., Nahrstedt, K., and Brewster, G. B. "Analysis of Topology Aggregation Techniques for QoS Routing," *ACM Comput. Surv.*, vol. 39. September 2007.
- Uludag, S., Lui, K. S., and Uludag, Z. E. "QRP02-4: Probabilistic Path Selection Under Inaccuracy Via Augmented Shortest Path Algorithms," *Global Telecommunications Conference, 2006. GLOBECOM '06. IEEE*, pp. 1-5. November 2006.
- Uludag, S., Brewster, G., and Lui, K. S. "Statistical Guarantees in QoS Routing Based on Empirical Link Probability Information," *IEEE INFOCOM 2006 Student Workshop*, (Barcelona, Spain). April 2006. Accepted for Publication.
- Uludag, S., Tam, W. Y., and Lui, K. S. "Aggregating Path Information in Distance-Vector Protocols," *4th IASTED International Conference on Communications, Internet and Information Technology (CIIT)*, (Cambridge, MA, USA), pp. 200-205. October 2005.
- Uludag, S., Lui, K., Nahrstedt, K., and Brewster, G. "Comparative Analysis of Topology Aggregation Techniques and Approaches for the Scalability of QoS Routing," *Tech. Rep. TR-05-010*, DePaul University, School of Computer Science. May 2005.
- Uludag, S., Perkovic, L., and Brewster, G. "Stochastic Quality-of-Service Routing for Delay Sensitive Applications," *IEEE INFOCOM Student Workshop*, (Miami, FL). March 2005.
- Uludag, S., Perkovic, L., and Brewster, G. "Stochastic Shortest Path Algorithms for Delay Sensitive Applications in the Internet," *Institute for Operations Research and the Management Sciences (INFORMS) Triennial Conference*, (Miami, FL). July 2005. Accepted for Publication.
- Uludag, S. and Aly, S. "Multimedia QoS Support for IEEE 802.11 Wireless LANs," *School of Computer Science, Telecommunications and Information Systems Research Symposium (CTIRS '03)*, (Chicago, IL). November 2003.
- Uludag, S., Borella, M. S., Swider, D., and Brewster, G. B. "Analysis of End-to-End Internet Packet Loss: Dependence and Asymmetry," *Tech. Rep. AT 031798, 3Com Advanced*

Technologies. March 1998.

Uludag, S., Borella, M. S., Swider, D., and Brewster, G. B. "Internet Packet Loss: Measurement and Implications for End-to-End QoS," *ICPPW '98: Proceedings of the 1998 International Conference on Parallel Processing Workshops*, (Washington, DC, USA), pp. 3-12, IEEE Computer Society. August 1998.

Uludag, S., Borella, M. S., Brewster, G. B., and Sidhu, I. "Self-Similarity of Internet Packet Delay," *IEEE ICC*, (Montreal, Quebec, Canada), pp. 513-517. June 1997.

Other Publications:

Uludag, S. "The Impact of Electronic Media," *The Fountain Magazine*, vol. 32. October-December 2000.

Uludag, S. "On Intelligence, Effort, and Success," *The Fountain Magazine*, vol. 30. April-June 2000.

Service – Professor Uludag has been active in his department in a variety of capacities, including assessment and search committees, has served at College and University levels on nominating committees, and has also benefited his profession through review of papers for presentation and publication. Recent service on the University's General Education Curriculum Advisory Committee and a task force shaping the institution's strategic plan suggest increasing impact and is significant of his service.

External Reviewers:

Reviewer (A):

"Based on my evaluation of Dr. Uludag's research, I believe that he is pursuing a good research agenda that focuses on important and emerging topics relating to wireless networks and smart grid. He demonstrated independence in his research work by being a contributor of ideas in the telecommunications and networks research community as evident by the citations of his publications."

Reviewer (B):

"Several of his scholarly research was [sic] published in premier publications. In particular, *IEEE Computers* ([5]) is the flagship journal publication of IEEE Computer Society, the largest society in IEEE. Also, *ACM Computing Surveys* ([12]) is the flagship survey/tutorial publication of the ACM, the premier society for computer science professionals; only a few articles appear in every issue and this publication is widely read and has a high impact factor. Also, *Computer Networks* journal (Elsevier Science) [11] is a prestigious venue for research publication in computer networks. The publications in these journals undergo a rigorous review process, with one or two revisions. Only top quality research results make it to these journals."

Reviewer (C):

"Dr. Uludag has an impressive list of research accomplishments. His research publications include journal and conference articles. He also has a balanced mix of single-authored and multiple-authored publications. This manifests his ability to conduct research independently as well as in a team environment. I view this as a very positive attribute of a researcher. Quality of journals and conferences clearly speak about the quality of Dr. Uludag's research."

Reviewer (D):

"My concerns in this evaluation were to ensure that 1) the focus of the research is current in the fast-paced computer science/computer engineering area; 2) the techniques used are exemplary; 3) there is an understanding of both theoretical methods and practical applications for evaluating and understanding technology; and 4) Dr. Uludag is an active leader in this research. I believe Dr. Uludag passes all four tests in an exemplary way."

Reviewer (E):

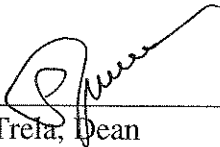
“Suleyman has also authored/co-authored many other papers in scholarly journal [sic] and proceedings of international conferences. His papers appear in reputed journals and proceedings of respected international conferences. He is also active in the profession with good visibility. Moreover, he has submitted papers to journals and conferences which are under review. This means his research activity is sustainable and an on-going process.”

Reviewer (F):

“... Dr. Uludag’s work has appeared in quality conferences and journals, and his service to the discipline and the community is outstanding.”

Summary of Recommendation: Professor Uludag is an outstanding teacher, an impressive scholar, and a committed supporter of the University through dedicated service. I am pleased to join the unanimous recommendations of his department colleagues and the College of Arts and Sciences Executive Committee in enthusiastically recommending Suleyman Uludag for promotion to the rank of associate professor of computer science, with tenure, Department of Computer Science, Engineering and Physics, College of Arts and Sciences.

Recommended by:



D. J. Trefa, Dean
College of Arts and Sciences

Recommendation endorsed by:



Gerard Voland, Provost and
Vice Chancellor for Academic Affairs



Ruth J. Person, Chancellor
University of Michigan-Flint

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