

Asst. Prof. MEHMET ŞÜKRÜ KURAN

Personal Information

Email: sukru.kuran@agu.edu.tr

Education Information

Doctorate, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği, Turkey 2007 - 2012

Post Graduate, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Sistem Ve Kontrol Mühendisliği, Turkey 2004 - 2007

Under Graduate, Yıldız Teknik Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği, Turkey 1998 - 2004

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, PHYSICAL LAYER ISSUES OF COMMUNICATION VIA DIFFUSION FOR BIO-NANOMACHINES, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği, 2012

Post Graduate, CROSS LAYER ROUTING IN WiMAX MESH NETWORKS, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Sistem Ve Kontrol Mühendisliği, 2007

Research Areas

Computer Sciences, algorithms, Simulation and Modelling, Computer Networks, Communications and Network Protocols, Data Routing, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Abdullah Gül Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2018 - Continues

Assistant Professor, Abdullah Gül Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2015 - 2018

Assistant Professor, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği, 2015 - 2017

Courses

Spec. Topics in CMPE : Future Internet Opportunities, Post Graduate, 2014 - 2015, 2015 - 2016, 2016 - 2017

Computer Networks, Under Graduate, 2016 - 2017

Playing with The Past, Under Graduate, 2016 - 2017

Art of Computing, Under Graduate, 2014 - 2015, 2015 - 2016, 2016 - 2017

Mobile Programming, Under Graduate, 2016 - 2017

Architectures of Current and Future Internet, Post Graduate, 2014 - 2015

Playing with The Past, Under Graduate, 2015 - 2016

Jury Memberships

Post Graduate, Tez Savunma Jürisi, Abdullah Gül Üniversitesi, December, 2016

Post Graduate, Tez Savunma Jürisi, Erciyes Üniversitesi, July, 2015

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **Transmitter Localization in Vessel-Like Diffusive Channels Using Ring-Shaped Molecular Receivers**
Turan M., Akdeniz B. C. , KURAN M. Ş. , Yılmaz H. B. , Demirkol I., PUSANE A. E. , TUĞCU T.
IEEE COMMUNICATIONS LETTERS, vol.22, pp.2511-2514, 2018 (Journal Indexed in SCI)
- **A Smart Parking Lot Management System for Scheduling the Recharging of Electric Vehicles**
Kuran M. Ş. , Viana A. C. , Iannone L., Kofman D., Mermoud G., Vasseur J. P.
IEEE TRANSACTIONS ON SMART GRID, vol.6, pp.2942-2953, 2015 (Journal Indexed in SCI)
- **A Novel Pre-Equalization Method for Molecular Communication via Diffusion in Nanonetworks**
Tepekule B., Pusane A. E. , Kuran M. Ş. , Tuğcu T.
IEEE COMMUNICATIONS LETTERS, vol.19, pp.1311-1314, 2015 (Journal Indexed in SCI)
- **CALCIUM SIGNALING: OVERVIEW AND RESEARCH DIRECTIONS OF A MOLECULAR COMMUNICATION PARADIGM**
KURAN M. Ş. , Tuğcu T., Edis B. O.
IEEE WIRELESS COMMUNICATIONS, vol.19, no.5, pp.20-27, 2012 (Journal Indexed in SCI)
- **Interference Effects on Modulation Techniques in Diffusion Based Nanonetworks**
KURAN M. Ş. , Yılmaz H. B. , Tuğcu T., Akyildiz I. F.
NANO COMMUNICATION NETWORKS, no.1, pp.65-73, 2012 (Journal Indexed in SCI Expanded)
- **Energy Model for Communication via Diffusion in Nanonetworks**
KURAN M. Ş. , Yılmaz H. B. , Tuğcu T., Özerman B.
NANO COMMUNICATION NETWORKS, no.2, pp.86-95, 2010 (Journal Indexed in SCI Expanded)
- **APPLICATIONS OF THE CROSS-LAYER PARADIGM FOR IMPROVING THE PERFORMANCE OF WIMAX**
KURAN M. Ş. , Gür G., Tuğcu T., Alagöz F.
IEEE WIRELESS COMMUNICATIONS, vol.17, no.3, pp.86-95, 2010 (Journal Indexed in SCI)
- **A survey on emerging broadband wireless access technologies**
KURAN M. Ş. , Tuğcu T.
COMPUTER NETWORKS, vol.51, no.11, pp.3013-3046, 2007 (Journal Indexed in SCI)

Articles Published in Other Journals

- **Service Class Differentiation in Scheduling of Electrical Vehicle Recharging**
Yılmaz H. B. , KURAN M. Ş. , Eryiğit S.
Telecommunication Reviews, vol.25, no.4, pp.592-604, 2015 (Refereed Journals of Other Institutions)

Book & Book Chapters

- **Understanding Communication via Diffusion: Simulation Design and Intricacies**
ACAR B., AKKAYA A., GENÇ G., Yılmaz H. B. , KURAN M. Ş. , Tuğcu T.
in: Modeling, Methodologies, and Tools for Molecular and Nano-scale Communications, Suzuki J., Nakano T., Moore M. J., Editor, Springer, London/Berlin , N/A, pp.1, 2014
- **MAC Layers of WMAN Technologies**
KURAN M. Ş. , Alagöz F., Tuğcu T.
in: Wireless Metropolitan Area Networks: WiMAX and Beyond, Zhang Y., Chen H-H., Editor, Auerback Publications , Boca Raton, pp.129-149, 2006

Refereed Congress / Symposium Publications in Proceedings

- **Channel Model of Molecular Communication via Diffusion in a Vessel-like Environment Considering a**

Partially Covering Receiver

Turan M., KURAN M. Ş. , Birkan Yılmaz H., Demirkol I., TUĞCU T.

IEEE International Black Sea Conference on Communications and Networking (BlackSeaCom), Batumi, Georgia, 4 - 07 June 2018, pp.153-157

- **MOL-Eye: A New Metric for the Performance Evaluation of a Molecular Signal**

Turan M., KURAN M. Ş. , Yılmaz H. B. , Chae C., TUĞCU T.

IEEE Wireless Communications and Networking Conference (WCNC), Barcelona, Spain, 15 - 18 April 2018

- **Moodle: Practical Advices for University Teachers**

PEDERSEN J. M. , KURAN M. Ş.

International Conference on Image Processing and Communications, Bydgoszcz, Poland, 13 - 15 September 2017, pp.1

- **Learning Management Systems on Blended Learning Courses: An Experience-based Observation**

KURAN M. Ş. , PEDERSEN J. M. , ELSNER R.

International Conference on Image Processing and Communications, Bydgoszcz, Poland, 13 - 15 September 2017, pp.1

- **Colibri: An International Blended Learning Experience based on Real-World Problems**

Pedersen J. M. , KURAN M. Ş. , Frick J., Mank L.

International Symposium on Project Approaches in Engineering Education (PAEE) – Active Learning in Engineering Education Workshop (ALE) '16, Guaraes, Portugal, 6 - 08 July 2016, pp.1-10

- **Smart Cities Recharged: Improving Electrical Vehicles Recharging by Routine-Aware Scheduling**

KURAN M. Ş. , Viana A. C. , Iannone L., Kofman D., Mermoud G., Vasseur J. P.

International Workshop on Smart City and Ubiquitous Computing Applications (SCUCA '14) in conjunction with IEEE International Conference on Wireless and Mobile Computing, Networking, and Communications, Larnaka, Cyprus (Kktc), 8 - 10 September 2014, pp.106-113

- **Channel Capacity of Calcium Signaling Based on Inter-cellular Calcium Waves in Astrocytes**

HEREN A. C. , KURAN M. Ş. , Yılmaz H. B. , Tuğcu T.

IEEE International Workshop on Molecular and Nano-scale Communications (MONACOM '13) in conjunction with IEEE ICC, Budapeşte, Hungary, 9 - 13 June 2013, pp.792-797

- **A Tunnel-based Approach for Signal Shaping in Molecular Communication**

KURAN M. Ş. , Yılmaz H. B. , Tuğcu T.

IEEE International Workshop on Molecular and Nano-scale Communications (MONACOM '13) in conjunction with IEEE ICC, Budapeşte, Hungary, 9 - 13 June 2013, pp.776-781

- **NANO AĞLARDA DİFÜZYON İLE HABERLEŞME ÜZERİNE GELİŞTİRİLMİŞ MODELLER**

KILIÇLI F. N. , ÖZŞAHİN M. T. , KURAN M. Ş. , Yılmaz H. B. , Tuğcu T.

Akademik Bilişim 2013, Antalya, Turkey, 23 - 25 January 2013, pp.1-5

- **Co-channel Interference for Communication via Diffusion System in Molecular Communication**

KURAN M. Ş. , Tuğcu T.

International ICST Conference on Bio-Inspired Models of Network, Information, and Computing Systems (BIONETICS), York, United Kingdom, 5 - 06 December 2011, pp.199-212

- **Modulation Techniques for Communication via Diffusion in Nanonetworks**

KURAN M. Ş. , Yılmaz H. B. , Tuğcu T., Akyıldız I. F.

IEEE International Conference on Communications (ICC '11), Kyoto, Japan, 5 - 09 June 2011, pp.1-6

- **Effects of Routing for Communication via Diffusion System in the Multi-node Environment**

KURAN M. Ş. , Yılmaz H. B. , Tuğcu T.

IEEE International Workshop on Molecular and Nano-scale Communications (MONACOM '11) in conjunction with IEEE INFOCOM, Şangay, China, 10 - 15 April 2011, pp.461-466

- **Nanoağlar ve Moleküler Haberleşme Teknikleri**

KURAN M. Ş. , Tuğcu T.

Akademik Bilişim 2011, Malatya, Turkey, 2 - 04 February 2011, pp.1

- **Hybrid frame structure for improving network throughput in WiMAX Mesh Networks**

Ulutas M. I. , Kuran M. Ş. , Tuğcu T.

2010 5th International Conference on Broadband and Biomedical Communications, IB2Com 2010, Malaga, Spain, 15 - 17 December 2010

- **Cross-Layer Routing-Scheduling in IEEE 802.16 Mesh Networks**

KURAN M. Ş. , Gür G., Alagoz F., Tuğcu T.

International Conference on MOBILE Wireless MiddleWARE, Operating Systems, and Applications, Innsbruck, Austria, 13 - 15 February 2008, pp.1-6

- **Quality of service in mesh mode IEEE 802.16 networks**

Kuran M. Ş. , Yilmaz B., Alagoz F., Tugcu T.

SoftCOM 2006 - International Conference on Software, Telecommunications and Computer Networks, Split-Dubrovnik, Croatia, 29 September - 01 October 2006, pp.107-111

- **YENİ NESİL UYDU AĞLARINDA SIKIŞIKLIK KONTROL TEKNİKLERİNİN PERFORMANS ANALİZİ**

KURAN M. Ş. , Tuğcu T.

GAP Mühendislik Kongresi, Şanlıurfa, Turkey, 26 - 28 April 2006, pp.1-9

Supported Projects

KURAN M. Ş. , EU Supported Other Project, Improving Employability through Internationalization and Collaboration, 2017 - Continues

KURAN M. Ş. , Project Supported by Higher Education Institutions, Abdullah Gül Üniversitesi Eğitim Öğretim Kalite Güvence Uygulamaları Alt Yapısının Geliştirilmesi, 2015 - 2017

KURAN M. Ş. , TÜBİTAK Project, Örüntü Tanıma ve Analiz Yöntemleri ile Hizmet Kalitesinin Arttırılmasına Yönelik Anormallik Tespit Uygulaması Geliştirilmesi, 2015 - 2017

KURAN M. Ş. , EU Supported Other Project, Collaboration and Innovation for Better, Personalized and IT-Supported Teaching, 2014 - 2017

Scientific Refereeing

Nano Communication Networks, SCI Journal, September 2017

Nano Communication Networks, SCI Journal, July 2017

IEEE Transactions on Vehicular Technology, SCI Journal, July 2017

IEEE Transactions on Molecular, Biological, and Multi-Scale Communications, SCI Journal, June 2017

IEEE Transactions on Vehicular Technology, SCI Journal, February 2017

IET Intelligent Transport Systems, SCI Journal, September 2016

IEEE Communications Letters, SCI Journal, July 2016

IEEE Transactions on Nanobioscience, SCI Journal, June 2016

IEEE Transactions on Nanobioscience, SCI Journal, December 2015

Citations

Total Citations (WOS):161

h-index (WOS):5