

## Lect. METİN ÖZTÜRK

### Personal Information

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### Education Information

Doctorate, University of Glasgow, Science and Engineering Graduate School, Electronics and Electrical Engineering, England 2016 - 2020

Post Graduate, Ankara Yıldırım Beyazıt University, Mühendislik Ve Doğa Bilimleri Fakültesi, Elektronik Ve Haberleşme Mühendisliği, Turkey 2013 - 2016

Under Graduate, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Elektrik Elektronik Mühendisliği Bölümü, Turkey 2007 - 2013

### Foreign Languages

English, C2 Mastery

### Academic Titles / Tasks

Lecturer, Ankara Yıldırım Beyazıt University, Mühendislik Ve Doğa Bilimleri Fakültesi, Elektrik-Elektronik Mühendisliği, 2020 - Continues

Research Assistant, Ankara Yıldırım Beyazıt University, Mühendislik Ve Doğa Bilimleri Fakültesi, Elektrik-Elektronik Mühendisliği, 2013 - 2016

### Courses

Tactical Wireless Communications and 5G Networks, Post Graduate, 2020 - 2021

Electronic, Under Graduate, 2020 - 2021

Materials Science for Electrical and Electronics Engineers, Under Graduate, 2020 - 2021

Principles of Electrical and Electronics Engineering, Under Graduate, 2020 - 2021

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

- I. **A Survey of Machine Learning Applications to Handover Management in 5G and Beyond**  
Mollel M. S., Abubakar A. I., Ozturk M., Kaijage S., Kisangiri M., Hussain S., Imran M. A., Abbasi Q. H.  
IEEE Access, 2021 (Journal Indexed in SCI Expanded)
- II. **DEKCS: A Dynamic Clustering Protocol to Prolong Underwater Sensor Networks**  
Omeke K. G., Mollel M. S., Ozturk M., Ansari S., Zhang L., Abbasi Q. H., Imran M. A.  
IEEE Sensors Journal, 2021 (Journal Indexed in SCI Expanded)
- III. **Intelligent handover decision scheme using double deep reinforcement learning**  
Mollel M. S., Abubakar A. I., Ozturk M., Kaijage S., Kisangiri M., Zoha A., Imran M. A., Abbasi Q. H.

- Physical Communication, vol.42, 2020 (Journal Indexed in SCI Expanded)
- IV. **Non-Invasive Hydration Level Estimation in Human Body Using Galvanic Skin Response**  
Rizwan A., Abu Ali N., Zoha A., Ozturk M., Alomainy A., Imran M. A. , Abbasi Q. H.  
IEEE Sensors Journal, vol.20, no.9, pp.4891-4900, 2020 (Journal Indexed in SCI Expanded)
  - V. **A novel deep learning driven, low-cost mobility prediction approach for 5G cellular networks: The case of the Control/Data Separation Architecture (CDSA)**  
Ozturk M., Gogate M., Onireti O., Adeel A., Hussain A., Imran M. A.  
Neurocomputing, vol.358, pp.479-489, 2019 (Journal Indexed in SCI Expanded)
  - VI. **Novel QoS-Aware Proactive Spectrum Access Techniques for Cognitive Radio Using Machine Learning**  
Ozturk M., Akram M., Hussain S., Imran M. A.  
IEEE Access, vol.7, pp.70811-70827, 2019 (Journal Indexed in SCI Expanded)
  - VII. **Energy-Aware Smart Connectivity for IoT Networks: Enabling Smart Ports**  
Ozturk M., Jaber M., Imran M. A.  
Wireless Communications and Mobile Computing, vol.2018, 2018 (Journal Indexed in SCI Expanded)

## Articles Published in Other Journals

- I. **Energy Optimization in Ultra-Dense Radio Access Networks via Traffic-Aware Cell Switching**  
ÖZTÜRK M., Abubakar A. I. , Nadas J. P. B. , Rais R. N. B. , Hussain S., Imran M. A.  
IEEE Transactions on Green Communications and Networking, 2021 (Refereed Journals of Other Institutions)

## Books & Book Chapters

- I. **Machine Learning for Decision Making in Healthcare**  
Rizwan A., Öztürk M., Abu Ali N., Zoha A., Abbasi Q. H. , Imran M. A.  
in: Engineering and Technology for Healthcare, Muhammad Ali Imran, Rami Ghannam, Qammer H. Abbasi, Editor, John Wiley & Sons, West Sussex, UK , London, pp.95-116, 2020
- II. **Seamless Indoor/Outdoor Coverage in 5G**  
Imran M. A. , Türkmen A., Öztürk M., Nadas J., Abbasi Q. H.  
in: Wiley 5G Ref: The Essential 5G Reference Online, Rahim Tafazolli, Periklis Chatzimisios, Chin-Liang Wang, Editor, John Wiley & Sons, West Sussex, UK , London, pp.1-23, 2020
- III. **Mobility Prediction Based Resource Management**  
Imran M. A. , Öztürk M., Abubakar A. I. , Klaine P. V. , Hussain S., Abbasi Q. H.  
in: Wiley 5G Ref: The Essential 5G Reference Online, Rahim Tafazolli, Periklis Chatzimisios, Chin-Liang Wang, Editor, John Wiley & Sons, West Sussex, UK , London, pp.1-18, 2020
- IV. **Cognitive radio spectrum sensing: from conventional approaches to machine-learning-based predictive techniques**  
Öztürk M., Abubakar A. I. , Hussain S., Abbasi Q. H. , Imran M. A.  
in: Flexible and Cognitive Radio Access Technologies for 5G and Beyond, Hüseyin Arslan, Ertuğrul Başar, Editor, The Institution of Engineering and Technology (IET), London, pp.481-512, 2020
- V. **Life-span Extension for Sensor Networks in the Industry**  
Öztürk M., Jaber M., Imran M. A.  
in: Wireless Automation as an Enabler for the Next Industrial Revolution, Muhammad Ali Imran, Sajjad Hussain, Qammer H. Abbasi, Editor, John Wiley & Sons, West Sussex, UK , London, pp.19-45, 2019

## Refereed Congress / Symposium Publications in Proceedings

- I. **Load-Aware cell switching in ultra-dense networks: An artificial neural network approach**  
Abubakar A. I. , Ozturk M., Rais R. N. B. , Hussain S., Imran M. A.  
2020 International Conference on UK-China Emerging Technologies, UCET 2020, Glasgow, England, 20 - 21 August 2020
- II. **Clustering based UAV base station positioning for enhanced network capacity**  
Ozturk M., Nadas J. P. B. , Klaine P. H. V. , Hussain S., Imran M. A.  
2019 International Conference on Advances in the Emerging Computing Technologies, AECT 2019, AlMadinah, AlManawarrah, Saudi Arabia, 10 February 2020
- III. **Reinforcement Learning driven Energy Efficient Mobile Communication and Applications**  
Asad S. M. , Ozturk M., Bin Rais R. N. , Zoha A., Hussain S., Abbasi Q. H. , Imran M. A.  
19th IEEE International Symposium on Signal Processing and Information Technology, ISSPIT 2019, Ajman, United Arab Emirates, 10 - 12 December 2019
- IV. **Flexible SDN/NFV-based SON testbed for 5G mobile networks**  
Patané G. M. M. , Valastro G. C. , Sambo Y. A. , Ozturk M., Hussain S., Imran M. A. , Panno D.  
23rd IEEE/ACM International Symposium on Distributed Simulation and Real Time Applications, DS-RT 2019, Cosenza, Italy, 8 - 09 October 2019
- V. **Motion sensor-based small cell sleep scheduling for 5G networks**  
Sambo Y. A. , Valastro G. C. , Patane G. M. M. , Ozturk M., Hussain S., Imran M. A. , Panno D.  
24th IEEE International Workshop on Computer Aided Modeling and Design of Communication Links and Networks, CAMAD 2019, Limassol, Cyprus (Gkry), 11 - 13 September 2019
- VI. **Q-learning assisted energy-aware traffic offloading and cell switching in heterogeneous networks**  
Abubakar A. I. , Ozturk M., Hussain S., Imran M. A.  
24th IEEE International Workshop on Computer Aided Modeling and Design of Communication Links and Networks, CAMAD 2019, Limassol, Cyprus (Gkry), 11 - 13 September 2019
- VII. **Coverage Analysis for Indoor-Outdoor Coexistence for Millimetre-Wave Communication**  
Turkmen A., Mollel M. S. , Ozturk M., Yao S., Zhang L., Ghannam R., Imran M. A.  
2019 UK/China Emerging Technologies, UCET 2019, Glasgow, Scotland, England, 21 - 22 August 2019
- VIII. **Spectrum Cost Optimization for Cognitive Radio Transmission over TV White Spaces using Artificial Neural Networks**  
Ozturk M., Abubakar A. I. , Hassan N. U. , Hussain S., Imran M. A. , Yuen C.  
2019 UK/China Emerging Technologies, UCET 2019, Glasgow, Scotland, England, 21 - 22 August 2019
- IX. **Handover Management in Dense Networks with Coverage Prediction from Sparse Networks**  
Mollel M., Ozturk M., Kisangiri M., Kajjage S., Onireti O., Imran M. A. , Abbasi Q. H.  
2019 IEEE Wireless Communications and Networking Conference Workshop, WCNCW 2019, Marrakech, Morocco, 15 - 18 April 2019
- X. **An Intuitionistic fuzzy TOPSIS and DEA approach to evaluate retail sector performance**  
YILDIZBAŞI A., ERDEBİLLİ B., ÖZTÜRK M.  
DEA40: International Conference on Data Envelopment Analysis, 16 - 18 April 2018
- XI. **A TOPSIS with Intuitionistic Fuzzy Sets and DEA Approach to Evaluate Retail Industry Performance Ability**  
ERDEBİLLİ B., YILDIZBAŞI A., ÖZTÜRK M.  
DEA40: International Conference of Data Envelopment Analysis, United Kingdom, 16 - 18 April 2018, pp.23-27
- XII. **Introducing a novel minimum accuracy concept for predictive mobility management schemes**  
Ozturk M., Klaine P. V. , Imran M. A.  
2018 IEEE International Conference on Communications Workshops, ICC Workshops 2018, Missouri, United States Of America, 20 - 24 May 2018, pp.1-6
- XIII. **Improvement on the performance of predictive handover management by setting a threshold**  
Ozturk M., Klaine P. V. , Imran M. A.  
86th IEEE Vehicular Technology Conference, VTC Fall 2017, Toronto, Canada, 24 - 27 September 2017, pp.1-5
- XIV. **3D transition matrix solution for a path dependency problem of markov chains-based prediction in cellular networks**

Ozturk M., Klaine P. V. , Imran M. A.

86th IEEE Vehicular Technology Conference, VTC Fall 2017, Toronto, Canada, 24 - 27 September 2017, pp.1-5

## **Scientific Refereeing**

Twenty Seventh National Conference on Communications (NCC), Conference Paper (Full Text), March 2021

IEEE International Conference on Communications (IEEE ICC), Conference Paper (Full Text), March 2021

IEEE ACCESS, Journal Indexed in SCI-E, January 2021

IEEE TRANSACTIONS ON NETWORK AND SERVICE MANAGEMENT, Journal Indexed in SCI-E, December 2020

IEEE TRANSACTIONS ON VEHICULAR TECHNOLOGY, SCI Journal, November 2020

IEEE WIRELESS COMMUNICATIONS LETTERS, National Scientific Refreed Journal, June 2020

IEEE INTERNET OF THINGS JOURNAL, SCI Journal, April 2020

Project Supported by Public Organizations in Other Countries, National Science Centre Poland , Poland, April 2020

IEEE ACCESS, Journal Indexed in SCI-E, March 2020

## **Scholarships**

YLSY, Ministry of Education, 2016 - 2020

## **Awards**

Mollel M. S. , Öztürk M., Kaijage S. F. , Kisangiri , Onireti O., Imran M. A. , Abbasi Q. H. , Workshop Best Paper Award, Ieee Wireless Communication And Networking Conference (Wcnc), April 2019