Huseyin Haci

No: 10A, Hurriyet Sok., Sakarya Mah., Gazimagusa, Kibris, Mersin 10 Turkey Tel: +90 533 864 94 26

E-mail: huseyin.haci1986@gmail.com

Web: http://linkd.in/1uynTeZ

Education

9/2010 – 3/2015, **Ph.D.** in Electronic Engineering, University of Kent, UK

Thesis: "Non-orthogonal Multiple Access (NOMA) with Asynchronous Interference Cancellation" under supervision by Prof Jiangzhou Wang.

2008 – 2010, M. Sc. in Computer Engineering, Eastern Mediterranean University, N. Cyprus

- Thesis: "Performance Investigation of Simulation Models of Wireless Mobile Ad Hoc Networks"
- ❖ CGPA: 4/4

2003 – 2007, B. Sc. with High Honors in Computer Engineering, Eastern Mediterranean University, N. Cyprus

- Graduation Project: "Internet Access and Bandwidth Management System"
- ❖ CGPA: 3.79/4

Honors and Awards

- 2012, Best Paper Award, IEEE GLOBECOM, USA
- 2012, Student Travel Grant, IEEE GLOBECOM, USA
- ❖ 9/2010 9/2013, School Postgraduate Research Scholarship, University of Kent, UK
- 2008, Outstanding Student Scholarship for Master's Degree, Ministry of Education, N. Cyprus
- 2003 2007, Top Student in Faculty of Engineering, Eastern Mediterranean University, N. Cyprus
- 2006, Outstanding Student Scholarship for Bachelor's Degree, Ministry of Education, N. Cyprus

Research Interests

Interested in development of novel concepts (algorithms and methods) and applications, as well as study of theoretical (probability and queueing theory) and computer simulation based performances, for the following technologies:

- Finite State Machines (FSM): automata systems, queueing (delay-sensitive) systems, parallel systems
- Problem Optimization: system mathematical modelling, parameter (energy, capacity) optimization
- Signal Processing: interference cancellation, iterative (turbo) detection and estimation, asynchronous signal processing
- System Multiple Access: non-orthogonal multiple access, superposition coding
- Resource Scheduling and Management: scheduling of mixture of delay-sensitive and non-delay-sensitive traffic, cooperation based resource allocation
- Performance Evaluation: reliability and capacity performances
- Control/Software Engineering: applications (smart sensing and actuation) for smart world, future services for assisted living (disabled and elderly living), e-health systems

Teaching and Work Experience

09/2015 - Present, Lecturer, Near East University, Nicosia, Cyprus

Electrical and Electronic Engineering Department

07/2015 – 09/2015, Postdoc Research Assistant, University of Kent, UK

❖ Optimal Resource Allocation for Non-orthogonal Multiple Access (NOMA)

<u>2011 – 2014</u>, **Demonstrator**, University of Kent, UK

❖ OPNET Modeller, Matlab programming, Microsoft Visual Studio and C/C++ programming

2012 - 2014, M. Sc. Graduation Project Advisor, University of Kent, UK

- Radio Resource Management for Wireless Local-loop (2013)
- Investigation of Routing Protocols for User-Centric Wireless Networks (2012)

2010 – 2013, Researcher, European Commission ICT FP7 ULOOP Project, UK

Resource Allocation in User-Centric Wireless Networks

2008-2010, Research Assistant, Eastern Mediterranean University, N. Cyprus

- ❖ A Type National Project: "Methods, Models and Algorithms of Dissemination of Information in Mobile Wireless Ad Hoc Networks"
- European Commission Project: "School's Initiative for Innovation and Change II: @School Computer Assisted Foreign Language Education"

<u>2006 – 2007</u>, **Technical Team Member**, Computer Centre Network Support Group, Eastern Mediterranean University, N. Cyprus

❖ Installation, Configuration and Management of Cisco Secure ACS Server, CISCO Switches and Routers

Training and Certifications

- ❖ 2011, OPNET Training Class II Advanced Modeler, OPNET, UK
- ❖ 2011, OPNET Training Class I Introduction to Modeler, OPNET, UK
- 2008, Corinex Certified Powerline Professional, Corinex, Slovakia
- 2006, Cisco Certified Network Associate 2: Router and Routing Basics, Eastern Mediterranean University, N. Cyprus
- 2005, Cisco Certified Network Associate 1: Network Basics, Eastern Mediterranean University, N. Cyprus

Volunteer Experience

- 09/2015 Present, Technical Program Committee Member, IEEE VTC2016-Spring, China
- ❖ 01/2015 09/2015, **Technical Program Committee Member**, EUSPN-2015, Germany
- ❖ 11/2013 09/2015, Web Chair, IEEE ICC 2015, UK
- ❖ 04/2013 01/2015, **Founding Chairman**, University of Kent IEEE Branch, UK
- ❖ 04/2013, Session Chair, IEEE WCNC 2013, China
- 2011 2015, Student Representative at Graduate Studies Committee, School of Engineering and Digital Arts, University of Kent, UK

List of Publications

Patent

[P1] **H. Haci**, H. Osman, H. Zhu, R. Sofia and L. Lopes, "Method and apparatus for communication in a wireless network," Application number: Europe 13191667.8, 6 November 2013

Book Chapters

- [B2] **H.Haci**, H. Zhu and J. Wang, "Resource Allocation in User-Centric Wireless Networks," Chapter in User-Centric Networking: Future Perspectives, LNSN, Springer, 2014
- [B1] P. Mendes, W. Moreira, T. Jamal, **H.Haci** and H. Zhu, "Cooperative Networking in User-Centric Wireless Networks," Chapter in User-Centric Networking: Future Perspectives, LNSN, Springer, 2014

❖ Journal Publications

- [J3] L. Lopes, R. Sofia, **H. Haci** and H. Zhu, "A Proposal for Dynamic Frequency Sharing in Wireless Networks," IEEE Transactions on Networking, Accepted, to Appear, 2015. **(SCI)**
- [J2] A. Kostin, G. Oz and **H. Haci**, "A Restricted Flooding Mechanism for Efficient Anycast Server Localization in MANETs," Wireless Networks, Springer, vol. 21, no. 5, pp. 1603-1612, December 2014. **(SCI)**
- [J1] A. Kostin, G. Oz and **H. Haci**, "Performance Study of a Wireless Mobile Ad Hoc Network with Orientation-dependent Inter-node Communication Scheme," International Journal of Communication Systems, vol. 27, no. 2, pp. 322-340, February 2014. **(SCI-Expanded)**

Conference Papers

- [C7] **H. Haci**, H. Zhu and J. Wang, "A Novel Interference Cancellation Technique for Non-orthogonal Multiple Access (NOMA)," IEEE Global Communications Conference (GLOBECOM2015), December 2015, San Diego, California, USA.
- [C6] **H. Haci** and H. Zhu, "Performance of Non-orthogonal Multiple Access with a Novel Interference Cancellation Method," IEEE International Conference on Communications (ICC2015), June 2015, London, UK.
- [C5] L. Lopes, R. Sofia, H. Osman and **H. Haci**, "A Proposal for Elastic Spectrum Management in Wireless Local Area Networks," IEEE Conference on Computer Communications (INFOCOM2014) Demo Session, April 2014, Toronto, Canada.
- [C4] **H. Haci** and H. Zhu, "Novel Scheduling Characteristics for Mixture of Real-time and Non-real-time Traffic," IEEE Wireless Communications and Networking Conference (WCNC2013), April 2013, Shanghai, China.
- [C3] **H. Haci**, H. Zhu and J. Wang, "Novel Scheduling for a Mixture of Real-time and Non-real-time Traffic," IEEE Global Communications Conference (GLOBECOM2012), December 2012, Anaheim, California, USA.
- [C2] **H. Haci**, H. Zhu and J. Wang, "Resource Allocation in User-Centric Wireless Networks," IEEE 75th Vehicular Technology Conference (VTC2012), May 2012, Yokohama, Japan.
- [C1] **H. Haci**, G. Oz and A. Kostin, "Performance study of a wireless mobile ad hoc network with orientation-dependent inter-node communication links," International Symposium on Computer and Information Sciences (ISCIS2009), September 2009, Kalkanli, N. Cyprus.

Technical Reports

- [T2] R. Sofia, W. Moreira, J. Saltarin, A. Lopes, T. Jamal, V. Moreno, Q. Zhou, J. Seigneur, C. Ballester, **H. Haci**, H. Zhu, H. Osman, S. Peters, M. Yildiz and A. Bogliolo, "D3.8 ULOOP Framework Design and Implementation Report," SITILABS, University Lusofona, number SITI-TR-13-04, Technical Report, 2013.
- [T1] R. Sofia, P. Mendes, W. Moreira, J. Saltarin, L. Lopes, Q. Zhou, J. Seigneur, C. Ballester, H. Haci, H. Zhu, H.

Osman, S. Peters, M. Yildiz and A. Bogliolo, "ULOOP Deliverable D3a - Specification of ULOOP functionality based on flow-chart and link to code available on the ULOOP SVN server," COPELABS, number COPELABS-SITI-TR-13-20, Technical Report, 2013.

***** White Paper

[W1] P. Mendes, W. Moreira, C. Pereira, T. Jamal, A. Bogliolo, **H. Haci** and H. Zhu, "Cooperative Networking in User-centric Wireless Networks," ULOOP White Paper 05, 2012.