Baturalp Buyukates

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EDUCATION	**University of Maryland**, College Park, MD, USA *Ph.D.*, Electrical and Computer Engineering, August 2016 to present Advisor: Prof. Sennur Ulukus **Bilkent University**, Ankara, Turkey *Bachelor of Science*, Electrical and Electronics Engineering, September 2011 to January 2016 *Minor*, Economics **Telecom SudParis**, Evry, France *Exchange Student*, Computer and Communication Networks, January 2014 to June 2014
RESEARCH INTERESTS	Age of information; optimization, scaling laws and resource allocation for low latency wireless communication systems.

PROFESSIONAL EXPERIENCE

Research Assistant <div align="right">University of Maryland</div>
August 2016 to present <div align="right">College Park, MD, USA</div>
Age of Information, Low Latency Wireless Communication Systems

Research Intern <div align="right">National Magnetic Resonance Research Centre</div>
July 2015 to August 2016 <div align="right">Ankara, Turkey</div>
Saritas Lab, Magnetic Particle Imaging

Intern <div align="right">Turkish Aerospace Industries Inc.</div>
July 2014 to August 2014 <div align="right">Ankara, Turkey</div>
Space Group, On-Board Data Handling Systems

Intern <div align="right">Turkish Airlines Technic Inc.</div>
August 2013 to September 2013 <div align="right">Istanbul, Turkey</div>
Avionics Dept, ATE Shop

TEACHING EXPERIENCE

Graduate Teaching Assistant <div align="right">University of Maryland</div>
<div align="right">College Park, MD, USA</div>

Fall 2019, Signal and System Theory (ENEE 322),
Spring 2019, Information Theory (ENEE 627),
Fall 2018, Convex Optimization (ENEE 662),
Spring 2018, Digital Circuits and Systems Laboratory (ENEE 245).

HONORS AND AWARDS

Recipient of Jacob K. Goldhaber Travel Grant, University of Maryland, December 2019.
Student paper finalist, 53rd Asilomar Conference on Signals, Systems, and Computers, November 2019.
Clark School of Engineering Distinguished Graduate Fellowship, University of Maryland, August 2016 to August 2017.
Research Excellence Award, Department of Electrical and Electronics Engineering, Bilkent University, May 2016.
Bilkent University Undergraduate Fellowship, September 2011 to June 2016.
Ranked 360th among 1.5 million in National University Entrance Examination, 2011.

PUBLICATIONS

Journal Papers (Under Review):

1. **B. Buyukates**, A. Soysal and S. Ulukus, *Scaling Laws for Age of Information in Wireless Networks,* IEEE Transactions on Wireless Communications, submitted November 2019.

2. **B. Buyukates** and S. Ulukus, *Timely Distributed Computation with Stragglers,* IEEE Transactions on Communications, submitted, October 2019.

Journal Papers (Published/To Appear):

1. **B. Buyukates,** A. Soysal and S. Ulukus, *Age of Information in Multihop Multicast Networks,* Journal of Communications and Networks, special issue on Age of Information, 21(3):256-267, June 2019.

Conference Papers:

1. **B. Buyukates,** A. Soysal and S. Ulukus, *Age of Information Scaling in Large Networks with Hierarchical Cooperation,* IEEE Global Communications Conference, Waikoloa, HI, December 2019.

2. **B. Buyukates,** A. Soysal and S. Ulukus, *Age of Information in Multicast Networks with Multiple Update Streams,* 53rd Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, November 2019.

3. **B. Buyukates,** A. Soysal and S. Ulukus, *Age of Information Scaling in Large Networks,* IEEE International Conference on Communications, Shanghai, China, May 2019.

4. **B. Buyukates,** A. Soysal and S. Ulukus, *Age of Information in Two-Hop Multicast Networks,* 52nd Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, October 2018.

5. **B. Buyukates,** D Sarica and EU Saritas, *Self Calibration for Relaxation- and System-Induced Delays in X-space MPI,* 6th International Workshop on Magnetic Particle Imaging, Lubeck, Germany, March 2016.

PROJECTS	Weight Adjustments to Mitigate Overfitting in Deep Neural Networks (DNNs), September 2018 to December 2018. Relaxation- and System-Induced Delay Estimation and Optimum Image Reconstruction in X-space Magnetic Particle Imaging, October 2014 to August 2016. Personalized Smart Shopping Assistant (Senior Project), September 2014 to June 2015. Urban Sensing for Ad Networks (URSA Project), February 2014 to June 2014.
SKILLS	**Computer Skills:** MATLAB, Java (Beginner), C (Beginner), Python (Beginner), LaTeX. **Language Skills:** Turkish (Native), English (Fluent), French (Beginner), German (Beginner).
COURSEWORK	Machine Learning, Digital Communications, Multi-user Communications, Real Analysis I, Real Analysis II, Estimation and Detection Theory, Convex Optimization, Nonlinear Control Systems, Optimal Control, Information Theory, System Theory, Random Processes in Communication and Control.
SERVICE	Participate in reviewing technical papers in high-impact journals and reputable conferences of the field, in particular:

- IEEE Transactions on Networking
- IEEE Transactions on Communications
- IEEE Transactions on Wireless Communications
- IEEE Wireless Communications Letters
- IEEE Global Communications Conference (Globecom)
- IEEE International Symposium on Information Theory (ISIT)
- IEEE Information Theory Workshop (ITW)

OTHER	Member of IEEE Member of IEEE Communications Society

Last updated: December 5, 2019.