Baris Yamansavascilar

Bogazici University
Department of Computer Engineering
barisyamansavascilar.com
linkedin.com/in/baris-yamansavascilar
baris.yamansavascilar@boun.edu.tr

Education

Doctor of Philosophy | ***Computer Engineering*** — Sept. 2019 – Present
Bogazici University — Istanbul, Turkey
Advisor: Prof. Cem Ersoy

Master of Science | ***Computer Engineering*** — Sept. 2016 – May 2019
Bogazici University — Istanbul, Turkey
Thesis: Fault Tolerance in the Data Plane of Software-Defined Networks
Advisor: Prof. Cem Ersoy

Bachelor of Science | ***Computer Engineering*** — Sept. 2010 – May 2015
Yildiz Technical University — Istanbul, Turkey
Thesis: Network Traffic Classification Using Machine Learning Techniques
Advisor: Assist. Prof. Mehmet Amac Guvensan

Research Interests

Edge Computing, Mobile Cloud Systems

Deep Reinforcement Learning, Machine Learning

Software Defined Networks, NFV, 5G

Research Experience

Bogazici University — Sept. 2016 – Present
NETLAB — Istanbul, Turkey
- Studying on Federated Learning solutions for Edge Computing
- Studying for efficient offloading approaches in Edge Computing using deep learning
- Studied on enhancing QoS and QoE for fault tolerance problem in SDN

Yildiz Technical University — Sept. 2013 – July 2016
Intelligent Systems Lab — Istanbul, Turkey
- Network intrusion detection problem was investigated
- Network traffic classification problem was studied using machine learning
- Studied on human activity recognition using smartphones

Employment

Research Assistant — Sept. 2016 – Present
Bogazici University — Istanbul, Turkey

Researcher — July 2015 – July 2016
Yildiz Technical University — Istanbul, Turkey

Intern — Aug. 2014
Microsoft — Istanbul, Turkey

Intern — June 2014 – July 2014
Ziraat Technology — Istanbul, Turkey

Intern — July 2013 – Aug. 2013
Turk Telekom — Istanbul, Turkey

PUBLICATIONS

B. Yamansavascilar, A. C. Baktir, A. Ozgovde, and C. Ersoy, "Fault tolerance in SDN Data Plane Considering Network and Application Based Metrics", *Journal of Network and Computer Applications*, vol. 170, pp. 102780, 2020.

M. S. Kuran, A. Dilmac, O. Topal, **B. Yamansavascilar**, S. Avallone, T. Tugcu, "Throughput-maximizing OFDMA Scheduler for IEEE 802.11ax Networks", *IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC)*, pp. 1-7, 2020, Virtual Conference.

B. Yamansavascilar, A. C. Baktir, A. Ozgovde, and C. Ersoy, "Enhancing QoE for Video Streaming Considering Congestion: A Fault Tolerance Approach", *IEEE INFOCOM 2019 - IEEE Conference on Computer Communications Workshops*, pp. 258-263, 2019, Paris, France.

B. Yamansavascilar, A. C. Baktir, A. Ozgovde, and C. Ersoy, "Fault Tolerant Data Plane Using SDN", *The 25th Signal Processing and Communications Applications Conference (SIU)*, 2017, Antalya, Turkey.

B. Yamansavascilar, M. A. Guvensan, A. G. Yavuz, and M. E. Karsligil, "Application Identification via Network Traffic Classification", *The International Conference on Computing, Networking and Communications (ICNC)*, pp. 843-848, 2017, San Francisco, USA.

B. Yamansavascilar, M. A. Guvensan, "Activity Recognition on Smartphones: Efficient Sampling Rates and Window Sizes", *The International Workshop on the Impact of Human Mobility in Pervasive Systems and Applications (PerMoby)*, pp. 1-6, 2016, Sydney, Australia.

PROJECTS AND RESEARCH

Deep Learning Systems for Edge Computing Sept. 2019 – Present
Bogazici University

OFDMA Scheduler Development for IEEE 802.11ax March. 2019 – March. 2020
Bogazici University, funded by AirTies

Fault Tolerance in the Data Plane of Software-Defined Networks Jan. 2017 – May 2019
Bogazici University, MSc Thesis

Service Management on Multitier IT Architecture Jan. 2017 – Jan. 2019
Bogazici University

Distributed Data Processing and Applications for Mobile Edge Computing Aug. 2017 – June 2018
Bogazici University, funded by Netas

Making Art More Accessible April 2017 – July 2017
Bogazici University, funded by European Union

Advanced Threat Detection Using Machine Learning Techniques July 2015 – July 2016
Yildiz Technical University, funded by Crypttech

Network Traffic Classification Using Machine Learning Techniques Sept. 2014 – June 2015
Yildiz Technical University, BSc Thesis

Activity Recognition on Smartphones Sept. 2013 – June 2014
Yildiz Technical University, BSc Junior Project

SKILLS

Languages: Turkish (Native), English (Fluent), French (B1)
Programming: C, C++, Java, Python, Swift, MATLAB, HTML/CSS, Javascript, PHP, SQL
Framework/Library: Keras, TensorFlow, Django, Floodlight SDN Controller
Simulator/Emulator: NS-3, Mininet, CloudSim, EdgeCloudSim
Tool: Wireshark, Weka
Document Creation: Microsoft Office Suite, Keynote, LaTeX

Honors and Awards

Honor Student 2015
Yildiz Technical University

Third Place in Chess Tournament Spring 2008
Inter High School Pertevniyal Chess Tournament in Istanbul

Winner of Chess Tournament Spring 2007
Inter High School Chess Tournament in Kagithane District

References

Prof. Cem Ersoy
Department of Computer Engineering
Bogazici University
North Campus, Istanbul 34342, Turkey
+90 212 359 6861
ersoy@boun.edu.tr

Prof. Tuna Tugcu
Department of Computer Engineering
Bogazici University
North Campus, Istanbul 34342, Turkey
+90 212 359 7611
tugcu@boun.edu.tr

Assist. Prof. Atay Ozgovde
Department of Computer Engineering
Galatasaray University
Ciragan Cad., Istanbul 34349, Turkey
+90 212 227 4307
aozgovde@gsu.edu.tr