

Mustafa Talha Avcu

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EDUCATION

University of Southern California

Los Angeles, USA

Master of Science in Computer Science, CGPA: 4.00/4.00

May 2022

- Selected Courses: Machine Learning, Analysis of Algorithms, Database Systems, Applied Machine Learning for Games, Estimation Theory, Random Processes, Applied Natural Language Processing

Bilkent University

Ankara, Turkey

Bachelor of Science in Electrical and Electronics Engineering, CGPA: 3.93/4.00

Jun 2019

- Exchange student at Korea University for one semester

TECHNICAL SKILLS

Programming Languages: Python, MATLAB, Java, C++, SQL

Machine/Deep Learning Libraries: Keras, Tensorflow

Operating Systems and Others: Linux

WORK EXPERIENCE

Neural Systems Engineering and Information Processing Lab (NSEIP)

Los Angeles, USA

Research Assistant

Sept 2019 - Dec 2021

- Modelled large-scale brain networks during direct electrical stimulation, and developed nonlinear models that are amenable for control in closed-loop brain computer interface (BCI) applications

Agency for Science, Technology and Research (A*STAR)

Singapore

Data Science Intern

Jun 2018 - Sept 2018

- Studied the detection of epileptic seizures using least EEG channels, and developed a Convolutional Neural Network (CNN) architecture **SeizNet**

Bilkent University

Ankara, Turkey

Teaching Assistant for CS114 Introduction to Programming for Engineers

Summer 2016, Spring 2017

- Taught, interviewed and graded students in the laboratory sessions

HONORS & AWARDS

Academic Excellence Graduation Award, 2019 Bilkent University Electrical and Electronics Engineering Department

IEEEExtreme Programming Competition

- **IEEEExtreme 10.0, 2016:** Ranked 2nd in Turkey, 20th in IEEE Region 8, 65th among all participants as a team of three undergraduate students
- **IEEEExtreme 9.0, 2015:** Ranked 3rd in Turkey, 30th in IEEE Region 8, 82nd among all participants as a team of three undergraduate students

Nationwide University Entrance Exam (LYS): Ranked in top 0.01% among 2 million students in Turkey, 2014

PUBLICATIONS

M. T. Avcu, Z. Zhang, and DWS. Chan "Seizure Detection Using Least EEG Channels by Deep Convolutional Neural Networks" IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2019 - **20 citations**

EXTRACURRICULAR ACTIVITIES

Bilkent IEEE Student Branch Robotics and Automation Society Member, 2016-2017: Participated in electronic and robotic-focused tutorials as a teaching assistant

GazeteBilkent Science and Technology Journalist, 2014-2016: Reported the latest developments in computer hardware technology in Bilkent University's official newspaper