Mertcan Akçay

EDUCATION

ETH Zurich - MSc in Robotics, Systems and Control

Zurich, Switzerland

Thesis: Learning to Fly a Quadrotor by Watching Flight Videos

Sept 2021 - Jan 2024

CGPA: 5.53/6.00

CGPA: 3.93/4.00

Bilkent University - BSc in Electrical and Electronics Engineering

Aug 2017 - June 2021

Ankara, Turkey

Nanyang Technological University

Singapore

Exchange Semester

Jan 2020 - May 2020

Professional Experience

ASELSAN Ankara, Turkey

Autonomous Systems Design Engineer

Jan 2025 - Present

• Working on autonomous driving for unmanned ground vehicles in unstructured environments focusing on robotic perception.

 $Research\ and\ Development\ Intern$

June 2020 - Aug 2020

 Conducted research on Multiple Object Tracking and implemented several algorithms to track multiple objects in a clutter.

Plan-S Satellite and Space Technologies

Ankara, Turkey

Image Processing and AI Engineer

Feb 2024 - Jan 2025

Contributed to the development of the imaging pipeline for a multi-spectral Earth observation satellite project.
Tasks include conducting camera characterization and implementing AI applications for analysis of collected images.

Disney Research | Studios

Zurich, Switzerland

Research Intern

Sept 2022 - Mar 2023

• Worked on multimodal machine learning architectures to perform audio-to-video synchronization on in-the-wild videos. Outperformed SOTA methods with a significantly smaller model. Accepted at CVPR 2024.

ACADEMIC EXPERIENCE

ETH Zurich, Switzerland

 $Teaching\ Assistant$

Aug 2023 - Jan 2024

• Prepared a project and assisted in preparing course materials for the Stochastics and Machine Learning course, which is a core course in the Mechanical Engineering bachelor's program.

ETH Media Technology Center

Zurich, Switzerland

Research Assistant

Nov 2021 - Aug 2022

• Developed a face tracker which approximates the 3D models of people's heads from images via deep learning. Also developed a pipeline for generating synthetic videos of people given an arbitrary source audio recording.

SKILLS

Languages: Turkish (native), English (fluent), German (beginner)

Programming: Python, C++, MATLAB, ROS, PyTorch

Honors & Awards

Bilkent University Academic Excellence Award: Awarded at graduation based on CGPA

Bilkent University Comprehensive Scholarship: Full tuition waiver & stipend during the BSc program

KYK Scholarship of the Republic of Turkey: Awarded monthly stipend during the BSc program due to the success at university entrance exam

Nationwide University Entrance Exam: Ranked 75th among 2 million students in Turkey, 2017

Publications

- Clara Fernandez-Labrador, Mertcan Akçay, Eitan Abecassis, Joan Massich, and Christopher Schroers. "DiVAS: Video and Audio Synchronization with Dynamic Frame Rates" . In: The IEEE / CVF Computer Vision and Pattern Recognition Conference (CVPR), 2024.
- Ayça Takmaz*, Jonas Schult*, Irem Kaftan[†], Mertcan Akçay[†], Bastian Leibe, Robert Sumner, Francis Engelmann, and Siyu Tang. "3D Segmentation of Humans in Point Cloud with Synthetic Data". In: International Conference on Computer Vision (ICCV), 2023.