

# Mertcan Akçay

cakcay@ethz.ch | [cmakcay.github.io](https://cmakcay.github.io)

## EDUCATION

### ETH Zurich - MSc in Robotics, Systems and Control

*Thesis: Learning to Fly a Quadrotor by Watching Flight Videos*

Zurich, Switzerland

*Sept 2021 – Present*

### Bilkent University - BSc in Electrical and Electronics Engineering

*CGPA: 3.93/4.00*

Ankara, Turkey

*Aug 2017 – June 2021*

### Nanyang Technological University

*Exchange Semester*

Singapore

*Jan 2020 – May 2020*

## PROFESSIONAL EXPERIENCE

### Disney Research | Studios

*Research Intern*

Zurich, Switzerland

*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. Pending patent application.

### ASELSAN

*Research and Development Intern*

Ankara, Turkey

*June 2020 – Aug 2020*

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

### Scientific and Technological Research Council of Turkey (TUBITAK)

*Research and Development Intern*

Ankara, Turkey

*June 2019 – July 2019*

- Worked on image processing tasks and trained object detection models.

## ACADEMIC EXPERIENCE

### ETH Zurich

*Teaching Assistant*

Zurich, Switzerland

*August 2023 – Present*

- Preparing a project for the course Probability and Machine Learning which will be offered as a core course of the Mechanical Engineering bachelor program.

### ETH Media Technology Center

*Research Assistant*

Zurich, Switzerland

*Nov 2021 – Aug 2022*

- Developed a face tracker which approximates the 3D models of people's heads by training a deep neural network using face images and a 3D Morphable Face Model.
- Developed a pipeline for generating synthetic photo-realistic videos of people given an arbitrary source audio recording.

## PUBLICATIONS

- Ayça Takmaz\*, Jonas Schult\*, Irem Kaftan<sup>†</sup>, Mertcan Akçay<sup>†</sup>, 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.

## SKILLS

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

**Programming:** Python, C++, MATLAB, Java, 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 75<sup>th</sup> among 2 million students in Turkey, 2017