Doruk Çetin

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EDUCATION

ETH Zurich — Zurich, CH
M.S. in Computer Science, GPA: 5.61/6.00 (Focus: Visual Computing) — 2018–2021
- Thesis: "Learning in-the-wild Temporal 3D Pose Estimation from MoCap Data"

Middle East Technical University — Ankara, TR
B.S. in Computer Engineering, GPA: 3.96/4.00 (ranked 2nd/190 in the dept.) — 2013–2018
- Thesis: "AlgoTrade: A web-based algorithmic trading and backtesting framework"

EXPERIENCE

Align Technology — Zurich, CH
Research Engineer — 2021/07 - Present

Arbrea Labs — Zurich, CH
Deep Learning Engineer — 2021/04 - 2021/07
- Visualizing the results of plastic surgery through augmented reality

DisneyResearch|Studios — Zurich, CH
Research Intern at Animation Group — 2020/11 - 2021/02
- Markerless motion capture through training on synthetic data

ETH Zurich — Zurich, CH
Student Research Assistant at Data Analytics Lab — 2019/05 - 2019/09
- Interpretability in adversarial word embeddings for text

Imperial College London — London, UK
Research Intern at Intelligent Behaviour Understanding Group (iBUG) — 2017/07 - 2017/09
- A novel audiovisual dataset for visual speech recognition

École Polytechnique Fédérale de Lausanne — Lausanne, CH
Research Intern at Data Intensive Applications and Systems Laboratory (DIAS) — 2016/06 - 2016/09
- Microarchitectural analysis of OLAP database systems

SKILLS

- **Coding:** Mainly using **Python** and comfortable with **C/C++**. Have used **Swift**, **Matlab** and **Java** in the past.
- **Deep Learning:** Experienced in **PyTorch**, **TensorFlow/Keras**, **Chainer** and **CoreML**.
- **Tools:** Routinely using **LaTeX**, **Git** and **VSCode**, have used **CMake**, **OpenGL**, **XCode** and **SQL**.
- **Web:** Using vanilla **HTML/CSS** on top of **Jekyll/Liquid** for my personal website, familiar with **JavaScript**.
- **OS:** Prefer working on **Linux** or **Windows**, worked also on **MacOS** and **iOS**.

Publications

[1] S. Petridis, J. Shen, **D. Cetin**, and M. Pantic, "Visual-Only Recognition of Normal, Whispered and Silent Speech", in *2018 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, Apr. 2018, pp. 6219–6223.

Languages

Turkish (Native), **English** (Fluent, TOEFL: 112/120), **Spanish** (Elementary)

Teaching

- **Student Teaching Assistant** at Middle East Technical University   Spring 2018
  Programming Language Concepts (CENG 242)
- **Student Teaching Assistant** at Middle East Technical University   Fall 2016
  Introduction to C Programming (CENG 230)
- **C Programming Language Tutor** at IEEE METU Student Branch   Fall 2016
  An introduction to programming and a tutorial for the school courses for non-CS students

Projects

See full list of projects on **dcetin.me/projects**

- **Master's Thesis Project** (Python, PyTorch)
  Advisor: Prof. Otmar Hilliges of AIT Lab in ETH Zurich
    - Built a competitive human pose estimation framework trained only on mocap data without paired images.
    - Investigated methods to train joint models that address pose estimation and motion prediction together.

- **AV Digits Database** (Python, Keras, Theano, TensorFlow, AutoIt)
  Advisor: Prof. Maja Pantic of iBUG group in Imperial College London
    - Created the user interface and oversaw the data collection, then analysed and corrected the collected data.
    - Worked on the transfer of the codebase from Theano/Lasagne to TensorFlow/Keras.

Scholarships and Awards

- ETH Zurich Direct Doctorate in Computer Science Scholarship   2018–2020
- 3rd place in METU Ceng Demo Day 2018, final year project exhibition of the department   2018
- Erasmus+ Traineeship Scholarship   2017
- Summer@EPFL Scholarship   2016
- Ranked 4th among 1.9 million participants nationwide in Undergraduate Placement Examination (LYS)   2013
    - METU Development Foundation Scholarship for Outstanding Success   2013–2018
    - Merit based Prime Ministry Scholarship   2013–2018