Görkay Aydemir

@ gorkayaydemir@gmail.com | In LinkedIn | O GitHub | Website | Turkey

EDUCATION

Koc University

Istanbul, Turkey

M.Sc. in Computer Engineering Sep 2023 – Now

CGPA: 4.00/4.00

Middle East Technical University

Ankara, Turkey

B.Sc. in Computer Engineering Sep 2017 – Jul 2022

CGPA: 3.99/4.00, 2^{nd} out of 2540

Ankara Science High School Ankara, Turkey

High School Diploma Sep 2013 – Jun 2017

RESEARCH EXPERIENCE

KUIS (Koc University - Is Bank) AI Center

Istanbul, Turkey

Research Intern

Nov 2021 - Sep 2023

• Conducted research on Unsupervised Video Object Segmentation under supervision of Dr. Fatma Guney and Dr. Weidi Xie

• Conducted research on Motion Forecasting of Autonomous Vehicles under supervision of Dr. Fatma Guney

University of Illinois at Urbana-Champaign (UIUC)

Champaign, Illinois, US

Research Intern

June 2021 - Nov 2021

• Conducted research on the interaction of ML systems in Autonomous Vehicles and end-to-end testing of them under supervision of Dr. Reyhaneh Jabbarvand

METU Image Processing and Pattern Recognition Lab

Ankara, Turkey

Research Intern

Aug 2020 - Sep 2020

• Worked on some Computer Vision related tasks including image processing and literature studies about Computer Vision-Deep Learning under supervision of Dr. Emre Akbaş

WORK EXPERIENCE

Codeway Studios Istanbul, Turkey

AI Research Scientist May 2023 - Oct 2023

• Worked on development of Generative AI solutions, specifically Diffusion Models

AI Research Engineer Nov 2022 – May 2023

• Worked on reproduction and improvements of recent Generative AI methods

Havelsan Ankara, Turkev

 $Aug\ 2021-Sep\ 2021$

• Worked on messaging between radars and internal systems. Specifically design and optimization of test cases

• Worked on messaging between radars and internal systems. Specifically design and optimization of test cases

Simsoft Ankara, Turkey

 $June\ 2019-Aug\ 2019$

• Worked on a simulation-game project

PUBLICATIONS

- **G. Aydemir**, X. Cai, W. Xie, F. Güney, Track-On: Transformer-based Online Point Tracking with Memory, International Conference on Learning Representations (*ICLR*), 2025
- M. R. Barın, G. Aydemir, F. Güney, Robust Bird's Eye View Segmentation by Adapting DINOv2, European Conference on Computer Vision VCAD Workshop, 2024
- G. Aydemir, W. Xie, F. Güney, Can Visual Foundation Models Achieve Long-term Point Tracking?, European Conference on Computer Vision EVAL-FoMo Workshop, 2024
- G. Aydemir, W. Xie, F. Güney, Self-supervised Object-centric Learning for Videos, Conference on Neural Information Processing Systems (NeurIPS), 2023
- **G.** Aydemir, A. K. Akan, F. Güney, ADAPT: Efficient Multi-Agent Trajectory Prediction with Adaptation, International Conference on Computer Vision (*ICCV*), 2023
- **G. Aydemir**, A. K. Akan, F. Güney, Trajectory Forecasting on Temporal Graphs, arXiv preprint, arXiv:2207.00255, 2022

Professional Service

Reviewer: CVPR 2024/2025, ICLR 2025, ECCV 2024

Teaching: Teaching assistant at Computer Vision with Deep Learning, Operating Systems, and Introduction to Computer Engineering courses.

ACHIEVEMENTS

Ranked 1^{st} in CENG Demoday 2022 (METU Computer Engineering Department Graduation Project competition) with the project DIP: Dynamic Insurance Pricing

Ranked within the top 100 in the 2017 National University Entrance Exam over more than 2 million candidates

Research Interest

Point Tracking Object-Centric Learning Object Discovery

SKILLS

Programming Languages: Python, C, C++

Libraries and Frameworks: PyTorch, NumPy, Scikit-Learn

Languages: Turkish (Native), English (Professional)