# Merve Rabia Barın

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#### LinkedIn Github Google Scholar Website

## Education

M.Sc. Student in Computer Engineering

Sep 2022 - Present

Koc University, Istanbul, Turkey

GPA: **3.81** / **4.00** 

B.Sc. in Computer Engineering Sep 2017 - Jun 2022

Bogazici University, Istanbul, Turkey

GPA: **3.71** / **4.00** 

Highschool Degree 2013 - 2017

Izmir Science Highschool, Izmir, Turkey

Research Interests Computer Vision, Perception for Autonomous Driving, Generative Models, Synthetic Data

Research Experience Graduate Student Researcher

Oct 2022 - Present

Autonomous Vision Group, KUIS AI, Koc University

• Working under the supervision of Dr. Fatma Guney to improve the robustness and generalizability of Bird's Eye View (BEV) perception models.

Undergraduate Student Researcher

Nov 2021 - Jun 2022

Creative AI Technologies Lab, Bogazici University

• Worked under the supervision of Dr. Pınar Yanardag on manipulating the latent space of pre-trained GANs to control specific attributes in generated images.

Undergraduate Student Researcher

Feb 2021 - Aug 2021

### TUBITAK <sup>1</sup>

• Worked with Dr. Esra Erdem on multi-agent pathfinding and combinatorial optimization, developing algorithmic solutions.

Undergraduate Student Researcher

June 2020 – Aug 2020

Sabanci University

 Analyzed and modeled Turkish TV series data from IMDb to predict their success using ML algorithms.

**Publications** 

Barın, M. R., Aydemir, G., Güney, F. (2024). Robust Bird's Eye View Segmentation by Adapting DINOv2, European Conference on Computer Vision - 2nd Workshop on Vision-Centric Autonomous Driving (VCAD).

Doner, B., Balcioglu, E. S., **Barin, M. R.**, Kocasari, U., Tiftikci, M., Yanardag, P. (2022). PaintInStyle: One-Shot Discovery of Interpretable Directions by Painting, Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) Workshops (pp. 2288-2293).

Peer Review

IEEE International Conference on Robotics and Automation (ICRA), 2025

<sup>&</sup>lt;sup>1</sup>The Scientific and Technological Research Council of Turkey

### Experience

### Teaching Assistant

Oct 2022 - Present

Koc University, Istanbul, Turkey

- COMP305, Algorithms and Complexity
- COMP523, Computer Vision for Autonomous Driving
- COMP100, Introduction to Programming

Data Science Intern

Jan 2022 - Aug 2022

Hepsiburada.com, Istanbul, Turkey

• Built a machine learning model to predict potential merchant churn, addressing the imbalanced data problem.

Artificial Intelligence Intern

Jun 2021 - Jul 2021

Baykar Technology, *Istanbul*, Turkey

• Implemented a real-time path planning algorithm that provides alternative paths for UAV and designed path shortener algorithm for polygonal paths.

# Achievements & Scholarships

### Achievements

• Ranked 262th out of 2 million students in *National University Entrance Exam*, 2017

# Scholarships

- MSc Scholarship by TUBITAK, Oct 2022 Present
  - Acceptance Rate : 10%
- KUIS AI Fellowship Scholarship by KUIS AI, Oct 2022 Present
- vGHC EMEA Student Scholarship by AnitaB.org, 2021
- National Academic Achievement Scholarship by KYK, Sep 2017 Jun 2022
- Research Assistant Intern Scholarship by TUBITAK, Feb 2021 Aug 2021

# Technical Skills

# Programming Languages

 $\bullet$  Python  $\bullet$  C++

## Libraries & Frameworks

• PyTorch • NumPy