# Merve Rabia Barın

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LinkedIn  Github  Google Scholar  Website

| **Education** | *M.Sc. Student in Computer Engineering* | Sep 2022 - Present |
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| | 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** [1]
- 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*

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[1] The Scientific and Technological Research Council of Turkey

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| **Experience** | *Teaching Assistant* | Oct 2022 - Present |

Koc University, *Istanbul*, Turkey
- COMP305, *Algorithms and Complexity*
- COMP523, *Computer Vision for Autonomous Driving*
- COMP100, *Introduction to Programming*

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| | *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.

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| | *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 (Acceptance Rate : 10%), Oct 2022 – Present
- *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*
- Python    • C++

*Libraries & Frameworks*
- PyTorch    • NumPy

**Languages**
- English, *TOEFL: 109*
- Turkish, *Native*