Yakup Emre Şahİn

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Experience

University of Liège *Science with AI Lab (SAIL)* — Liège, Belgium
Doctoral Researcher — Oct 2025 | Present

- Developing novel deep learning techniques for scientific foundation models under the supervision of **Prof. Gilles Louppe**.

Helmholtz Munich *Helmholtz AI* — Munich, Germany
Research Assistant — Sept 2024 | Sept 2025

- Developing a transformer-based model to infer ODEs from multiple observations of dynamical systems under the supervision of **Prof. Niki Kilbertus**.

CERN *Beam Instrumentation Group* — Geneva, Switzerland
Summer Intern — June 2022 | Sept 2022

- Analysis and interpretation of hollow electron beam profile data from EBTS (Electron Beam Test Stand) for HL-LHC with **Dr. Muhammed Sameed**.

Koç University *Gravity Group* — Istanbul, Turkey
Undergraduate Research Assistant — Oct 2021 | June 2023

- Using relaxation method to numerically simulate neutron stars to constrain the parameter space for Gauss-Bonnet Theory with **Prof. Fethi M. Ramazanoğlu**.

Education

University of Liège — Liège, Belgium
PhD Deep Learning — Oct 2025 | Present

Ludwig Maximilian University of Munich — Munich, Germany
MS Physics | *Grade: 1.39/1.0* — Oct 2023 | August 2025
with AI specialization

Boğaziçi University — Istanbul, Turkey
BS Electrical & Electronics Engineering | *GPA: 3.73/4.00* — Sep 2018 | June 2023
BS Physics (Double Major)

Selected Publications

- Yakup Emre Şahin, Niki Kilbertus, and Sören Becker. *Predicting symbolic ODEs from multiple trajectories*. 2025. arXiv: `2510.23295 [cs.LG]`. URL: `https://arxiv.org/abs/2510.23295`
- Ekrem S. Demirboğa, Yakup Emre Şahin, and Fethi M. Ramazanoğlu. "Subtleties in constraining gravity theories with mass-radius data". In: *Phys. Rev. D* 108.2 (2023), p. 024028. DOI: `10.1103/PhysRevD.108.024028`
- Adriana Rossi et al. "DC and pulsed electron beam test facility at CERN". in: *JACoW* IPAC2023 (2023), TUPL104. DOI: `10.18429/JACoW-IPAC2023-TUPL104`

Scholarships and Awards

- DAAD-TEV Master's Degree Scholarship
- Boğaziçi University High Honors Certificates
- National Undergraduate Scholarship Program (2205) by TUBITAK
- Ranked 0.02 percent in Nationwide University Entrance Exam (YKS) among 2.5 million high school students in Turkey

Skills

Machine Learning Tools:	Lightning, Wandb, PyTorch, JAX, Tensorflow, Keras
Computational Tools:	C/C++, Python, LaTeX, LabVIEW, VHDL, MATLAB, Mathematica
Simulation Tools:	Simulink, MuMax^3, Xilinx ISE, LTSpice, CST Studio
Languages:	Turkish (Native), English (Advanced), French (Beginner)
Hobbies:	Guitar Playing, Composing, Poetry

References available upon request