Curriculum Vitae

1 Personal Details

- Surname: Varol
- Name: Aygün
- ORCID ID: 0000-0002-4029-7676
- Date of CV: 23.05.2025

2 Degrees

- D.Sc. (ongoing), Computing and Electrical Engineering (Internet of Things), Tampere University
- M.Sc. (2022), Electrical and Electronics Engineering (Analog Circuit Design), Isparta University of Applied Sciences
- B.Sc. (2017), Electrical and Electronics Engineering (Industrial Automation), Manisa Celal Bayar University

3 Other Education and Expertise

- The European Summer School on Artificial Intelligence (2024), ESSAI & ACAI
- Introduction to Generative AI (2023), Google Cloud

4 Language Skills

- Native language: Turkish
- Other language skills:
  - English (Proficient - C1, IELTS: 7)
  - Finnish (Elementary)
  - German (Elementary)

5 Current Employment

- Doctoral Researcher (Since 2023), Faculty of Information Technology and Communication Sciences, Tampere University, Finland
  - My doctoral research focuses on creating intelligent indoor environments by integrating the Internet of Things (IoT) with Artificial Intelligence (AI). I am particularly interested in potential risks associated with AI deployment in these environments. With this aim, I contribute as a researcher to the EVIL-AI Project, which investigates AI-related harms and develops mitigation strategies.

6 Previous Work Experience

- Research Assistant (2020–2023), Faculty of Technology, Isparta University of Applied Sciences, Turkey
  - My main task was conducting the laboratory courses of the Fundamentals of Electrical and Electronics, Electronic, Circuit Analysis, Digital Systems, Digital System Design, System Design with Microprocessor.
- Electrical Maintenance Engineer Intern (2016), Habas Industrial and Medical Gases Production Industries Inc., Turkey
  - I was responsible for monitoring operations and maintenance in the power generation sector at a natural gas combined cycle power plant
- Electrical Maintenance Engineer Intern (2015), Çimentaş İzmir Cement Factory, Turkey
  - I was tasked with the maintenance and repair of equipment in the electrical and electronics departments.

7 Research Funding and Grants

- Study Abroad Programme Scholarship (2021), The Republic of Türkiye Ministry of National Education, Total amount of 70,000€; This scholarship programme is designed to sponsor Turkish students for post-graduate studies abroad

8 Research Output

- Total number of publications: 5 (14 citations)
- List of publications:
  1. **Varol, A.**, Motlagh, N. H., Leino, M., Tarkoma, S., & Virkki, J. (2024). Creation of AI-driven Smart Spaces for Enhanced Indoor Environments–A Survey.
  2. **Varol, A.**, Yucel, F., Yuce, E., & Cakir, A. (2024). A single-IC realizable, electronically tunable, OTA-based full-wave rectifier with simultaneous positive and negative outputs. AEU-International Journal of Electronics and Communications, 155374.
  3. Kayaalp, K., & **Varol, A.** (2024). LeNet ve ResNet Derin Öğrenme Modelleri ile Asma Yapraklarının Sınıflandırması. Veri Bilimi, 7(1), 16-25.
  4. **Varol, A.**, Yucel, F., & Cakir, A. (2023). A new electronically tunable transimpedance-mode OTA-based first-order universal filter and its quadrature oscillator application. Journal of Circuits, Systems and Computers, 32(11), 2350184.
  5. **Varol, A.**, & Çetin, B. K. (2020). A New Mobile Application For Physical Measurement in A Cellular Network. Journal of Scientific Reports-A, (045), 178-200.

9 Research Supervision and Leadership Experience

- 5 undergraduate (Bachelor's) research project supervisions (2020–2023), TÜBİTAK 2209-A Research Grant Program for University Students

10 Teaching Merits

- Teaching Assistant (2020–2023), Faculty of Technology, Isparta University of Applied Sciences.

11 Other Key Academic Merits

- Guest Speaker at The 1st Winter School on 3D Digitainability (2024), AI Agents in Smart Spaces, Tampere University
- Being involved in grant proposal writing: European Commission funding application (PI: Johanna Virkki)

12 Other Merits

- Proficient in programming languages: Python, Java, C, C++, and LaTeX.
- Experienced with software tools: Visual Studio, Android Studio, MATLAB, PSpice, and Origin
- Designed and implemented IoT systems, and analog circuits