



# Veysi ADIN

**Nationality:** Turkish **Date of birth:** 17/02/1998 **Gender:** Male

**Phone number:** (+46) 0724476857 **Email address:** [veysi.adin@outlook.com](mailto:veysi.adin@outlook.com)

**LinkedIn:** <https://www.linkedin.com/in/veysiadn/>

**Website:** <https://veysiadn.github.io/>

**Home:** Grönborgsgatan 13, 85233 Sundsvall (Sweden)

## ABOUT ME

---

Hey! It's **Veysi ADIN**, and I'm an **Embedded System Engineer** in Sundsvall, Sweden. I'm a Ph.D. student at Mid-Sweden University, and currently, I'm working as a research assistant at Sensor Technology Research Center at Mid-Sweden University. I got my master's degree in the field of robotics and control software development. I enjoy robotics, electronics, DIY projects, and learning new things every day. I like to develop applications that solve real-life problems.

## WORK EXPERIENCE

---

### Research Assistant

**Mid Sweden University** [ 01/09/2022 – Current ]

City: Sundsvall

Country: Sweden

My research focuses on machine learning on embedded systems.

### Visiting Researcher

**ETH Zürich** [ 01/07/2023 – 30/09/2023 ]

City: Zürich

Country: Switzerland

- Worked on NATO project for gunshot detection and localization using machine learning on low cost ISPU.

### Research Assistant

**Korea Institute of Science and Technology** [ 01/09/2020 – 31/08/2022 ]

City: Seoul

Country: South Korea

I worked on development of control framework for medical robots, using EtherCAT protocol based on CiA402 standard and ROS2 as a middleware running on real-time Linux. As a use case for this control framework, we tested our framework on spine surgery robot being developed in Healthcare Robotics Center.

- I designed several PCBs, including safety watchdog PCB, and a flexible PCB for measuring force on the tip of attached instrument to spine surgery robot.
- Worked on safety and verification of medical robot and medical robot software complying various standards, including IEC62304, IEC60601-1/2, ISO 13485.
- [Project GitHub Link](#)
- [Project Documentation Link](#)

### R&D Intern

**Korea Institute of Science and Technology** [ 06/01/2020 – 31/08/2020 ]

City: Seoul

Country: South Korea

During this internship, I worked with a start-up company to implement control software and an initial prototype of a medical device called microdebrider, which is used in endoscopic sinus surgeries. Throughout this project, I used:

- C++
  - Qt
  - CiA402
  - Git
  - EPOS Linux Library
  - Doxygen
  - Raspberry Pi
  - CAN Protocol
  - EasyEDA (for custom PCB design)
  - SolidWORKS (for prototype case design)
- [Project GitHub Link](#)
  - [Project Documentation Link](#)

## EDUCATION AND TRAINING

---

### Electronics Ph.D.

*Mid Sweden University* [ 01/09/2022 – Current ]

City: Sundsvall

Country: Sweden

Website: <https://miun.se/>

### AI & Robotics Master

*University of Science and Technology / Korea Institute of Science and Technology* [ 01/09/2020 – 31/08/2022 ]

Address: 02792 Seoul (South Korea)

Website: <https://ust.ac.kr/eng.do>

Final grade: 4.33/4.5

Thesis: Development of Medical Device Control Software Framework

### Electrical & Electronics Engineer

*Mersin University* [ 01/09/2015 – 24/05/2019 ]

Address: 33110 Mersin (Türkiye)

Final grade: 3.67/4

Thesis: Wi-Fi Controlled Natural Gas Valve System With Android Based Software

## LANGUAGE SKILLS

---

Mother tongue(s): **Kurdish** | **Turkish**

### Other language(s):

#### English

**LISTENING C2 READING C2 WRITING C2**

**SPOKEN PRODUCTION C2 SPOKEN INTERACTION C2**

#### Korean

**LISTENING B1 READING B1 WRITING A2**

**SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1**

*Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user*

## DIGITAL SKILLS

---

### AI / Machine Learning / Deep Learning

Python / Tensorflow / PyTorch / ONNX & ONNX Runtime / MATLAB / Julia / Pandas Numpy Scikit-learn Scipy libraries

## **Embedded System Design**

C / C++ / Qt / STM32 / Altium Designer / Proteus / PCB Design

## **Prototyping Products**

SolidWorks / SMD soldering / Arduino / Raspberry Pi

## **Others**

LaTeX / EtherCAT / CiA 402 / ROS/ROS2 / Real-time Linux

## **CI / CD**

Atlassian stack (Jira, Confluence, ...) / Git / Docker

## **CONFERENCES AND SEMINARS**

---

### **Leveraging Acoustic Emission and Machine Learning for Concrete Materials Damage Classification on Embedded Devices**

[ IEEE Transactions on Instrumentation and Measurement, 23/08/2023 – 23/08/2023 ]

Link: <https://ieeexplore.ieee.org/document/10227301>

### **Real-Time Acoustic Monitoring of Foraging Behavior of Grazing Cattle Using Low-Power Embedded Devices**

[ IEEE Sensors Applications Symposium (SAS), 2023, Ottawa, Canada, 18/07/2023 – 20/07/2023 ]

Write here the description...

Link: <https://ieeexplore.ieee.org/abstract/document/10254175/>

### **Tiny Machine Learning for Real-time Postural Stability Analysis**

[ IEEE Sensors Applications Symposium (SAS), 2023, Ottawa, Canada, 18/07/2023 – 20/07/2023 ]

Link: <https://ieeexplore.ieee.org/abstract/document/10254126>

### **Tiny Machine Learning for Damage Classification in Concrete Using Acoustic Emission Signals**

[ IEEE International Instrumentation and Measurement Conference (I2MTC), 2023, Kuala Lumpur, Malaysia, 22/05/2023 – 25/05/2023 ]

Link: <https://ieeexplore.ieee.org/document/10175972>

### **Development of Control Framework for Spine Surgery Robot Using EtherCAT**

[ The 17th Asian Conference on Computer Aided Surgery (ACCAS) / Virtual Conference, 08/12/2021 – 10/12/2021 ]

Link: <https://github.com/veysiadm/veysiadm.github.io/raw/master/assets/pdf/>

[ACCAS2021\\_VeysiADIN\\_ChunwooKim.pdf](#)

### **Development of motor control component for medical robot software framework based on EtherCAT**

[ Seoul, South Korea / Korea Robotics Society Conference (KRoC), 19/05/2021 – 21/05/2021 ]

Link: [https://github.com/veysiadm/veysiadm.github.io/raw/master/assets/pdf/KROS\\_Paper\\_Veysi\\_-\\_Submitted\\_20210311.pdf](https://github.com/veysiadm/veysiadm.github.io/raw/master/assets/pdf/KROS_Paper_Veysi_-_Submitted_20210311.pdf)

## **HONOURS AND AWARDS**

---

### **Valedictorian of Engineering Faculty**

Mersin University Engineering Faculty [ 24/05/2019 ]

I have ranked first among the faculty of engineering students graduating in 2019.

## **Scholarship**

Vehbi Koc Foundation [ 01/09/2016 ]

## **HOBBIES AND INTERESTS**

---

### **Hobbies**

Basketball, football, hobby electronics, 3D printing, cooking, Sci-Fi movies and books.

---