

Mahmoud Osman

Graz, Austria | +43 660 6290311 | engmahmoudosman@outlook.com | linkedin.com/in/engmahmoudosman/

EDUCATION

Joanneum University of Applied Sciences

Graz, Austria

MSc. Electronics Engineering (Embedded Systems)

Oct 2024 - Present

University of Pécs

Pécs, Hungary

BSc. Electrical Engineering (Embedded Systems)

Sept 2019-Feb 2023

WORK EXPERIENCE

University of Pécs

Pécs, Hungary

Specialized Lecturer

Feb 2023 – Jan 2025

- Developed and instructed undergraduate courses in electrical engineering, focusing on microcomputers, project laboratory, communication engineering, and microelectronic systems design.
- Assessed, reviewed, and graded bachelor theses as an external examiner.
- Collaborated with department heads to revamp the undergraduate electrical engineering curriculum.
- Conducted research, development, and implementation of hardware and software design solutions for an IoT device used in office environments within the "Parameterized Comfort in Physical Spaces" research team.

PROJECT EXPERIENCE

LM5146 Buck Converter

Designed an 8-layer Buck Converter PCB based on LM5146 IC using Altium Designer 24. The features include typical 48V input voltage to 12V 6A output with 96% efficiency.

Data acquisition IoT device

- Designed and developed a data acquisition device measuring temperature, humidity, luminosity and background noise using an ESP32 microcontroller.
- Managed the entire system design process, from main system level to sensors and components selection.
- Created PCB schematics and layout designs using KiCAD.

SKILLS

Technical Hardware and PCB Development using Altium Designer, FPGA design using System Verilog in Vivado, Embedded C, FreeRTOS and OOP with C++, version control using Git, Debian Linux OS, documentation using Microsoft Office and Matlab, analog circuit design, Cadence PSPICE, Data analysis using Python, laboratory equipment: Keysight 100MHz Multi channel oscilloscope, function generator, digital multimeter, DC bench power supply.

Soft Skills Teamwork, Public Speaking, Teaching, Presenting

LANGUAGES

Arabic Native

English Proficient

German Conversational

Hungarian Conversational