

# Aya Alhwayan

## M.Sc. Biomedical Engineering

Köthen, 06366, Germany, +4915753362979,  
Aya\_alhwayan@outlook.com, <https://www.linkedin.com/in/aya-alhwayan/>



### Summary

Dedicated engineering professional with over three years of experience in medical technology, focusing on interoperability between medical devices, system integration, and embedded solutions. Knowledgeable in industry standards, including ISO 13485, ISO 9001, and ISO 11073, with experience in developing and optimizing data exchange solutions between medical devices and external systems. Skilled in Python, PyQt5, and FHIR integration, with a background in network analysis. Passionate about contributing to advancements in medical technology through innovation and problem-solving.

### Education

**Hochschule Anhalt University of Applied Sciences, Köthen, Germany**

Master of Science (M.Sc.) in Biomedical Engineering | 04.2025 – Present

**Hochschule RheinMain, Rüsselsheim am Main, Germany**

Exchange Semester, Biomedical Engineering | 04.2022 – 09.2022

**German Jordanian University (GJU), Madaba, Jordan**

Bachelor of Science (B.Sc.) in Biomedical Engineering | 10.2017 – 09.2022

**Alrashad Modern School, Madaba, Jordan**

High School Diploma (Jordanian Tawjihi) | 09.2016 – 09.2017

### Professional Experience

**Biomedical Engineer, 6G Health Institute GmbH, Markkleeberg, Germany | 03.2023 – Present**

- Involved in the development and implementation of a patient health interface (PHI).
- Well versed in Visual Studio Code and the application of Python in the development of algorithms for patient health interfaces, FHIR servers, and GUIs using the PyQt5 framework and QI designer.
- Developed embedded system solutions to optimize data transmission and integration between medical devices and external FHIR systems.
- Developed Python code for network analysis using broadband modems and network slicing technologies.
- Authored various technical publications within the scope of the project.
- Experienced with OnShape and KiCad/EasyEDA.
- Development of PHI using Pi Zero.
- Familiar with various broadband 5G modems.
- Familiar with key standards, including ISO 13485, ISO 9001, and ISO 11073.
- Author technical blog articles on healthcare technology and digital health.

**Student Assistant in Field Medical Product Business, Kuraray Europe GmbH, Hattersheim, Germany | 09.2022 – 02.2023**

- Managed complaints between EU countries, the EU headquarters, and Japan using Salesforce.
- Processed claim shipments between the EU and Japan, including proforma invoices and freight documents.
- Reviewed and evaluated existing documents based on importer checklists.
- Inspected newly received documents, uploaded, and stored them on SharePoint.
- Verified classification in the Safety Data Sheet (SDB).
- Conducted a market analysis on 3D printing.

**Biomedical Engineering Internship, Jordan University Hospital, Amman, Jordan | 09.2021 – 02.2022**

- Performed repairs and maintenance on medical devices.
- Participated in device simulations for emergency applications.
- Identified device settings and provided feedback for optimization.

### Technical Skills

Microsoft Office 365, C, Python, MATLAB, Arduino, Logisim, Visual Studio, Circuit Maker, Autodesk AutoCAD, Raspberry Pi, Qt Designer, PyQt5, FHIR HL7, Postman

### Languages

Arabisch (Mother Language), Englisch (B2), Deutsch (B2)