

MUHAMMED MUSA

Biomedical Engineer - Portfolio: muhammedmusa.me

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Summary

Biomedical Engineer combining a strong engineering background with experience in medical devices, international sales, export operations, data analytics, and artificial intelligence applications. Alongside my clinical and technical service experience, I actively contribute to international market development, customer and distributor relations, market research, quotation preparation, and export processes for medical products. I have also gained experience in ISO 13485 quality management systems and medical device quality processes. While continuing my M.Sc. in Biomedical Engineering at Istanbul Technical University, I further develop my expertise in data-driven analysis, healthcare technologies, and AI-assisted systems. I aim to create value in healthcare technologies and international business development by combining technical knowledge with commercial and analytical perspectives.

Skills

Biomedical Engineering: Medical Imaging, Healthcare AI, Medical Device Development, Clinical Workflow Analysis.

Data Analytics: SQL, Power BI, Data Visualization.

Education

M.Sc. in Biomedical Engineering

Ongoing

Istanbul Technical University

M.Sc. in Quality Management

2025

Sakarya University

B.Sc.: Biomedical Engineering (100% English)

2024

Yıldız Technical University – *Graduated*

Programming & AI: Python, MATLAB, Exploratory Data Analysis (EDA), Decision Support Systems.

Tools: GitHub, Git, Fusion 360, MS 365, Google Workspace, Claude Code, CodeX.

Experience

Biomedical Engineer & International Sales Specialist

07/2026 – Present

(Varimed Medical)

- Manage international sales and export processes for medical compression, lymphoedema, and orthopedic products.
- Conduct market research, identify potential customers, prepare quotations, and manage international customer relations.
- Coordinate technical and commercial communication with international distributors and business partners.
- Provide pre-sales technical support regarding product specifications, certifications, and customer requirements.
- Support export operations, order follow-up, technical documentation, and international business development activities.
- Contribute to medical device quality management activities, including documentation and processes related to ISO 13485 and regulatory requirements.

Project & Operations Assistant

01/2025 - 02/2026

(Reference Consultancy & Management Development)

- Contributed to international consulting and professional training projects for organizations operating across different countries.
- Supported process coordination, reporting, and documentation for AI-assisted HR assessment and decision support system projects.
- Coordinated communication and project activities between technical, operational, and management teams.
- Assisted in the planning and execution of training programs, workshops, conferences, and corporate events.
- Monitored project progress and collaborated with multidisciplinary teams in the development of technology-driven solutions

Technical Services Assistant

10/2024 - 12/2024

(3G Medikal)

- Provided technical support for endoscopy, colonoscopy, and other medical devices.
- Assisted with device maintenance, troubleshooting, and customer support processes.
- Collaborated with healthcare professionals to identify operational and technical requirements.
- Supported sales and after-sales technical service activities.

Biomedical Engineering Intern (3G Medikal)

09/2024 - 10/2024

- Observed technical service processes for endoscopy systems and other medical devices.
- Assisted with device maintenance, troubleshooting, and technical documentation activities.

Foreign Patients Department (*ISOM Orthopedics*)

08/2023 - 12/2023

- Coordinated communication and operational processes for international patients.
- Facilitated collaboration between patients, physicians, and administrative teams.
- Supported documentation, reporting, and process-tracking activities.
- Understanding of healthcare systems from both technical and patient-centered perspectives.

Biomedical Engineering Intern (*ISOM Orthopedics*)

07/2023 - 08/2023

- Observed orthopedic treatment and rehabilitation processes in a clinical environment.
- Gained practical experience in clinical workflows and patient management processes.

Projects

Healthcare Readmission Risk Analysis

- Developing a machine learning-based healthcare analytics system to predict patient readmission risks using structured clinical datasets.
- Applying data preprocessing, exploratory data analysis, feature engineering, and predictive modeling techniques.
- Focused on supporting healthcare decision-making through data-driven insights.

AI-Powered Hospital Decision Support Dashboard

- Designing an interactive healthcare analytics dashboard integrating operational KPIs, patient risk indicators, and decision support metrics.
- Utilizing healthcare data visualization and AI-assisted insights to support hospital management processes.
- Focused on improving operational efficiency and data-driven decision-making within healthcare environments.

ML & DL for Alzheimer's Disease Classification

- Developed a Convolutional Neural Network (CNN) to classify Alzheimer's disease stages using MRI datasets from ADNI and OASIS.
- Performed data preprocessing, augmentation, model training, and performance evaluation.
- Achieved over 90% classification accuracy using Python-based deep learning tools.

Languages

Arabic: Native - **English:** Professional (C1) - **Turkish:** Professional (C1)