Mohamed Ali in ⌗

Location: 91052 Erlangen, Germany (Locate on Google Maps)
E-Mail: m.ali.career@proton.me (Send an E-Mail)
Mobile: +49 163 6299056 (Call)
Language: Arabic (Native), German (Sufficient, B1/B2),
English (Fluent, IELTS), Spanish (Basics, OLS-Report)
Work Authorization: Eligible for full-time work in Germany.

Scan for PDF

Employment

Oct 2022 - Today	**Digitization Specialist (Working Student), Siemens Healthineers, Germany** **BI & Dashboarding:** Built Qlik Sense dashboards for orders, sales & backlog tracking. **Data Engineering:** SQL in Snowflake for ETL, joins, and views to streamline reporting. **Process Automation:** Automated reports & alerts with Python and Power Automate. **Advanced Analytics:** Supported ML forecasting, maintained weekly trend datasets.
Jun 2022 - Jul 2024	**Operations and IT Support (Volunteer), START Nürnberg, Germany** Boosted operations efficiency and managed technical infrastructure.
Apr 2022 - Sep 2022	**Outbound organizer (Working Student), Amazon, Germany** Controlled and reviewed the outbound process in a central warehouse
Oct 2019 - Mar 2020	**Teaching Assistant (Part-time), Mansoura University, Egypt** Supported the teaching and facilitated learning for two undergraduate courses

Technical Skills

Programming Skills	Good: **Python, SQL, Matlab, C++, R.** & Basics: Scala, Micro C, Prolog.
Software Proficiency	**Qlik, Snowflake, Databricks**, Microsoft Office, JIRA, SolidWorks, Proteus, WordPress, LaTex, MeVisLab.

Education

Oct 2020 - Sept 2025:	**M.Sc. in Health and Medical Data Analytics and Entrepreneurship** (Diploma) Technical Faculty, Friedrich–Alexander University Erlangen–Nürnberg, Germany. Final Score: 2.1 (Good).
Thesis title:	Allometric Modeling of Human REE with FDG-PET/CT, Grade: 1.0.
Example Courses:	Medical Device Regulations (MDR), Pattern Recognition, Advanced C++ Programming, Human-Computer Interaction, Service Innovation, Innovation and Leadership.
Sept 2021 - Jan 2022:	**Semester Abroad** (Certificate & Transcript) **Universidad Politécnica de Madrid, Spain** (Funded by: EIT-Health & Erasmus+)
Example Courses:	Big Data & Data Visualization, Data Processes, Complex Data In Health, Open Data And Knowledge Graphs, Intelligent Systems.
Sept 2013 - Jul 2019:	**B.Sc. in Biomedical Engineering.** Faculty of Engineering, Mansoura University, Egypt. Final Score in German System: 1.3 (91.61%, top 10%) . (Diploma & Transcript & Syllabus).
Thesis title:	Low Cost Ultrasound Cavitation and Liposuction System, Grade in German System: 1.0.
Example Courses:	Medical Imaging, Biometric and Medical Measuring Instruments, Anatomy, Physiology, Numerical Analysis, Sensors Devices, Project Management, Marketing, Physics, Statistics, Electromagnetic Fields, Analog and Digital Signal Processing, Nanotechnology.

University Projects

WS 2025	**Allometric Modeling of Human Resting Energy Expenditure Using FDG-PET/CT Imaging** Master's Thesis: Expanded research on PET-CT data to extract insights into metabolic parameters and organ volumes. **(Python)**
WS 2023	**Characterizing the Specific REE in PET-CT Images:** Initial research project applying statistical data analysis techniques and developing an allometric machine learning model to quantify resting energy expenditure. **(Report) (Python)**
SS 2022	**Tracking Olympiad:** Trained to track moving targets using deep learning algorithms. **(Python)**
WS 2022	**NLP with Disaster Tweets:** Classified a sample of Tweets using natural language processing algorithms and visualizations. **(Python)**

WS 2020	**Air Quality in Madrid:** Prepared and visualized in a simple GUI an extensive dataset (2001–2018) on the different levels of polluted substances in the Madrid atmosphere. **(R)**
SS 2019	**Prediction of Flight Delays:** Applied machine learning algorithms to a big data problem to predict the flight delay given "Data Expo 2009: Airline on-time data". **(Scala)**
WS 2019	**Automatic CPR Device:** Acquired experience in mechanical design using **Solidworks**. Conducted research to select the best mechanical mechanism and analyzed specifications of safe forces to apply on the thoracic cavity. (Report)
SS 2018	**Biomedical Image Segmentation Using a Histogram-Based Analysis:** Gained experience in **Matlab**. Created new functions for Otsu and Global-threshold segmentation techniques and accurately segmented lungs from MRI DICOM image samples. (Report)
WS 2017	**ECG Monitor by Arduino Shield:** Used **Proteus** to design an accurate Electrocardiogram circuit, executed the Printed Circuit Board (PCB), and installed it on an Arduino for monitoring by any computer device.

Internships and Training

16th - 20th Oct 2023:	**EELISA Entrepreneurship School, Waischenfeld** Collaborated with international teams to develop innovative business ideas, gaining expertise in business model generation, prototyping, storytelling, and pitching. (Certificate).
1st - 6th Sept 2021:	**Summer School on Learning from Health Data, Université Grenoble Alpes** Accomplished 30 hours of training in data analysis, innovation, and entrepreneurship, focusing on advancing strategies for anticipating, diagnosing, and treating leukemia.(Certificate)
1st - 30th May 2019:	**Field Training in Hospital Environment, Mansoura University Hospital:** Familiarized with the hospital planning Under the standards of the Egyptian Hospital Accreditation Program. -Inventory the installations and needs of operating rooms and intensive care units by the number, condition, brands, manufacturers' origins, and warranty.
3st - 14th Mar 2019:	**Siemens Service Engineering Training:** Trained in diagnosing software and hardware issues for MRI (e.g., Siemens Symphony) and CT (e.g., Perspective). Assisted with the installation of the Siemens Aera MRI.(Certificate)
Jun 2017 - Mar 2018:	**Internship of Medical Devices Maintenance, Medical Devices Maintenance Center:** Trained to **troubleshoot** and **maintain** a wide range of medical devices e.g.: Ultrasound scanners, Diathermy, ECG, Dental Units, Incubators, Sterilizing devices.
1st - 30th Aug 2017:	**Field Training in Hospital Environment, The Emergency Hospital of Mansoura:** Familiarized with the hospital **planning** from the civil engineering point of view according to The Design standards for Egyptian hospitals and health facilities. -Concentrated on the role of **engineering management** of the hospital.
1st - 30th Jul 2017:	**Electronics and Embedded Systems Training by Jelecom:** Targeted microcontroller architecture. -Applied a variety of mini-projects.
Jun - Sept 2017:	**Introduction to (Embedded System, Robotics, PID Control) Course, AI Academy:** Gained **Micro C** experience through a variety of small projects using different micro-controllers e.g. PIC16F628A. -Designed a functional robotic arm using **Solidworks**. -Applied PID control on different examples using **Matlab** and **Simulink**.

Awards & Honors

Sept 2021 - Jan 2022	EIT-Health & Erasmus+ study abroad scholarship.
Sept 2019 - Feb 2020	Teaching assistant job because of the undergraduate excellence.
Mar 2017 - Jul 2019:	Partial Scholarship for high academic performance for five semesters in a row.

Memberships

TodayJun 2022 - Today:	START Erlangen-Nuremberg eV
Oct 2021 - Oct 2022:	Erasmus Student Network
Nov 2019 - Today:	Egyptian Engineers Syndicate