

# AMIR MEHRABIANI

## ABOUT

My motivation and passion for programming is driven by the pride I feel that the code I write makes people's lives better!!! In addition to enriching the lives of others, I hope that my work allows me to learn from my own experiences, I take pleasure in challenging tasks and look forward to innovative projects.

## EXPERIENCE

### **HIGH-FIDELITY EEG DATA ACQUISITION & DSP** 11/2024 to Current

**Self-employed**, Germany

Embedded Systems & Signal Processing Specialist with expertise in developing full-stack EEG acquisition systems using ADS1299 and Python-based DSP algorithms.

### **SOFTWARE ENGINEERING TEAM LEAD** 04/2024 to 10/2025

**Neshan (Rajman Co.)**, Iran

- Lead the Software Engineering Team, focusing on web development and optimisation with an SEO-centric approach to increase organic traffic and user engagement..
- Directed the preparation and cleaning of large datasets for critical analytics and content generation projects.
- Optimised backend performance and service communication by utilising Redis and RabbitMQ, resolving critical bottlenecks, and improving service stability.
- Collaborated closely with content and infrastructure teams to align SEO strategy with development goals, ensuring technical implementation met business objectives.

### **SENIOR FULL STACK DEVELOPER** 10/2023 to 04/2024

**Neshan (Rajman Co.)**, City, Country

- Served as a Full-Stack Developer focusing on optimizing page load and rendering performance through Core Web Vitals improvements.
- Significantly improved SEO and search visibility through technical and content optimizations.

### **FULL STACK WEB DEVELOPER** 02/2017 to 08/2023

**East Oil and Gas Production Company (EOGPC)**, Mashhad, Khorasan, Iran

- Optimized organizational efficiency by translating complex manual processes into custom software architectures, resulting in a lean workforce and faster operational cycles.
- Engineered a centralized Workflow Automation Engine to govern critical internal processes (Access Control, Resource Allocation, Travel Management), eliminating bureaucracy and reducing approval times.
- Revamped Human Capital Management by building a custom HRM system (Node.js, Angular), effectively streamlining the entire employee lifecycle from onboarding to offboarding.
- Implemented a scalable Online Reservation Platform (ASP.NET Boilerplate, React.js) for booking tickets, hotels, and tours, centralizing sales channels and improving transaction efficiency.
- Developed a robust Parking Management Solution (ASP.NET Boilerplate, React.js), digitizing parking logistics to reduce manual oversight.




---

## SKILLS

- Python
- NumPy
- SciPy
- Pandas
- TypeScript
- Node.js
- React.js
- ASP.NET Boilerplate
- PostgreSQL
- ADS1299
- Bio-signal Acquisition
- ADC
- SPI
- I<sup>2</sup>C Communication
- ESP32
- EEG analysis
- Digital Filtering
- Band-pass Filtering
- Spectral Analysis
- Noise Reduction
- Real-time Data Streaming
- Process Automation
- Digital Transformation
- Problem Diagnosis

---

## LANGUAGES

- Persian:  C2  
Proficient
- English:  C1  
Advanced
- German (Deutsch):  A1  
Beginner

---

## EDUCATION

**Technische Universität Clausthal**, Clausthal-Zellerfeld, Lower Saxony, Germany  
**Master of Science**, Computer Science, 01/2027

**Islamic Azad University**, Neyshabur, Iran  
**Bachelor of Science**, Computer Software Engineering, 01/2012

---

## LINKEDIN

<https://www.linkedin.com/in/amir-mehrabiani>

---

## CERTIFICATIONS

- Introduction to Data Science in Python (2019)
- AWS Cloud Technical Essentials (2022)

---

## HOBBIES AND INTERESTS

- travel
- jogging
- following science and technology
- spend time for family