M. Saeed Mafipour

FULL-STACK DEVELOPER · SOFTWARE ENGINEER · WEB DEVELOPER

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- Munich, Germany
- February 18, 1995 · Age: 30

Education

Dr. -Ing. Technical University of Munich (TUM)   *Munich, Germany*
PH.D. IN ENGINEERING   *2020-2024*
- Research focus on software development, AI, and digitalization in construction

M.Sc. University of Tehran   *Tehran, Iran*
M.SC. IN STRUCTURAL ENGINEERING   *2017-2020*

B.Sc. University of Zanjan   *Zanjan, Iran*
B.SC. IN CONSTRUCTION ENGINEERING   *2013-2017*

Job Interests

- Developing full-stack web applications that integrate AI to enhance functionality, automation, and decision-making.
- Machine/Deep Learning for Complex Data – Working with structured and unstructured data.
- Creating digital representations of physical systems for simulation, optimization, and behavioral prediction.
- Machine/Deep learning with regular and irregular data structures such as images, texts, point clouds, and meshes.
- Data Interpretation Analysis – Extracting insights from visual and non-visual data using AI-driven techniques.

Job Experiences

2024-2025 — **Postdoctoral Researcher** Contributed to software development for machines and robots utilizing LiDAR and camera sensors, integrated with AI to interpret visual data, enabling automated navigation and manipulation tasks in the construction environment. — *TUM, Germany*

2020-2024 — **Scientific Staff** Developed software for model reconstruction, digital twinning, and point cloud processing. Created a model generator for Autodesk to produce digital twins of infrastructure. Additionally, served as a lecturer for the engineering databases (SQL and NoSQL) master course at TUM. — *TUM, Germany*

Technologies

Programming	JavaScript, TypeScript, Python, C#, C++, SQL, Java, LaTex, MATLAB.
Frontend	React, Next.js, Tailwind CSS, TypeScript, React Query, Shadcn, Sass, Bootstrap, HTML, CSS.
Backend	Node.js Express, Prisma, Supabase, MongoDB, PostgreSQL, Rest API, Sequelize, Mongoose.
AI and Machine Learning	Tensorflow, Pytorch, Keras, Scikit-Learn, Pandas, Numpy, 3D Deep Learning, Transformers, LLM.

Certificates

2024	Dr.-Ing./Ph.D. - Qualification Program in Engineering and Design	*Awarded by TUM*
2023	AI - Tensorflow Developer Certificate with the ID: 76696257	*Awarded by Google*

Honors & Awards

2022	Ranked 3rd in CV4AEC (Challenge on Computer Vision in the Built Environment).	*Remote event*
2021	Ranked 1st in CV4AEC (Challenge on Computer Vision in the Built Environment).	*Remote event*
2017	Ranked 30th out of 60,000 engineering students in M.Sc. National Entrance Exam.	*Tehran, Iran*
2017	Ranked 6th in the Engineering Scientific Olympiad.	*Tehran, Iran*

Languages

Persian (Native), **English** (C1-TOEFL IBT: 103/120), **German** (A2-B1)