

FELIX MOSER

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MUNICH, GERMANY

EDUCATION

Technical University of Munich *Oct 2021 - Exp. Mar 2025*
Master of Science | *Informatics*
Focus | *Engineering software-intensive systems*

Technical University of Denmark *Jan 2023 - Jul 2023*
ERASMUS | *Computer Science* *Copenhagen, Denmark*

Technical University of Munich *Oct 2021*
Bachelor of Science | *Informatics*

SKILLS

Expertise: Full Stack Software Engineering | Data Analysis | Time Series Analysis | Digital Health | Augmented Reality

Programming Languages: TypeScript | R (dplyr, ggplot2, forecast, tseries) | Python | Java | Swift

Technologies: React Native | Nest.js | Next.js | AWS (Beanstalk, EC2, S3, PostgreSQL, Redis, etc.) | Google Firebase | Apple ARKit | Apple HealthKit | OpenCV | OpenGL

Languages: German (Native) | English (Fluent) | French (Basic)

EXPERIENCE

Postgraduate Fellow | *Yale University* *Jan 2024 - Apr 2025*
Research Appointment at Digital Health Lab *New Haven, Connecticut*

- Led research under Prof. Fuad Abujarad on the societal effects of Michigan's 2017 background check policy extensions using R for ITS analysis; work is **awaiting peer review**.
- Supported by Prof. Frank Wharham (Duke, Harvard) on a report assessing the usability of ITS, ARIMA, and TimeGPT modeling for time series intervention analysis; **in development**.
- Collaborating on "MLx" with Prof. Ted Melnick & Andrew Loza, integrating LLMs and formal methods into clinical documentation to streamline processes and address systemic adoption challenges; **perspective paper in development**

Co-Founder | *BO24 UG (haftungsbeschränkt)* *Mar 2023 - Present*
Developing a smart and intuitive mobile inventory management system.

- Developed and deployed a scalable Nest.js GraphQL backend on AWS infrastructure.
- Developed and launched a React Native app on the App Store, enabling real-time collaboration and integrated in-app purchases for **3000+ active monthly users**.
- Designed and launched a responsive Next.js website for app promotion.

IT Consulting & Web-/App Development | *Freelance* *May 2020 - Present*
Delivered cutting-edge solutions using Next.js, React.js and Contentful CMS solutions.

- Collaborating with clients to define project goals, ensuring impactful user-centric deliverables
- Covering all aspects of UI/UX design, including creating wireframes, prototypes, and final designs in Figma, ensuring seamless user experiences tailored to client needs.
- Capable of **driving 1 million+ website impressions** post-launch and **boosting client turnover rates by up to 10x**.

- Conducting post-launch data analysis to measure success metrics and prepare detailed performance reports

Research Assistant | *Technical University of Munich*
Conducting research in Financial Mathematics

Oct 2022 - April 2023

- Engaged in research in Financial Mathematics, trying to refine the Sharpe ratio by incorporating aspects of Behavioral Finance and skill-based performance evaluation.
- **Presented results to Prof. Dr. Tim Kroenke's Lab at the Université de Neuchâte.**

Agile Coach | *Carl Zeiss Meditec AG*
Developing an indoor navigation system for clinics

Oct 2021 - Mar 2022
Munich, Germany

- Coached an international and diverse team in agile methods and 3D positioning to develop an indoor navigation system for cataract clinics in an industry research project.
- Final prototype **presented to ZEISS project management.**

iOS Instructor | *TUM Applied SE*
Teaching iOS Development with Swift and SwiftUI

Aug 2021 - Oct 2021

- Co-designed and taught an introductory course for iOS development with Swift and SwiftUI to **~70 students** as part of a four-member team.

Software Engineer | *University Hospital Bonn*
Developing a mobile epilepsy tracker for patients

Mar 2021 - Aug 2021
Bonn, Germany

- Led a team of six to develop an iOS app for epilepsy symptom and seizure tracking, integrating Apple Health data; **app used in a clinical trial.**

Teaching Assistant | *Technical University of Munich*
Teaching computer architecture in weekly sessions

Oct 2019 - Apr 2020

- Taught Assembly programming, VHDL, and computer architecture **twice per week to each ~30 students**; provided individual support during personal office hours and assisted with exam correction.

PROJECTS

Istros | *An Augmented Reality app for a museum exhibition*

Mar 2022 - Sep 2023

- Initiated an ongoing inter-university collaboration with the archaeology department of Ludwig Maximilians University Munich.
- Developed a mobile iOS AR app, addressing challenges in tracking, lighting, and device constraints for public exhibitions displaying 3D models of a sunken Roman cargo vessel and other artifacts.
- Integrated app-usage analytics system with an evaluation framework and conducted quantitative and qualitative studies among museum visitors.
- **Results scheduled for publication in MARE Journal.**

TUM4Health | *A concept for a student health management system*

Mar 2022 - Sep 2022

- Developed the React Native mobile app for the "TUM4Health" project, enabling students to access content from the central health management system **supported by "Techniker" health insurance.**

ARChess | *Playing virtual chess on your own board*

Apr 2021 - Jul 2021

- Volunteer project as part of the Master's course "Augmented Reality" by Prof. Gudrun Klinker
- Developed a 3D chess game based on OpenGL and OpenCV within a team of 5
- Implemented a video-based AR interface allowing users to augment virtual pieces onto a real chessboard
- Set up tracking, integrated chess minigames, developed parts of the game logic, and designed tailored hints for user moves.

- Developed a coordinate-based matrix multiplication scheme in Assembly x86.
- Benchmarked against traditional methods, achieved up to **5x faster computation** for sparse matrices (sparsity < 10%) using a COOS implementation; excelling in super low-dense cases (< 1%).

VOLUNTEERING

Yale Postgraduate Association | *Professional Development Group* *Feb 2024*
Organized events to support career growth and skill-building for Yale postgraduate students.

Organizer and Presenter | *Women in CS @TUM* *Oct 2022*
Organizer of an introductory programming course for high school girls.

Speaker of German Delegation | *European Youth Parliament - Euroscola* *Nov 2017*
Represented Germany on eco-friendly urban mobility; speech cited in official press release.

AWARDS & CERTIFICATIONS

PROMOS Scholarship (3600€) | *Technical University of Munich* *Jan 2024*

ERASMUS+ Santander Scholarship (3000€) | *European Union & Banco Santander* *Jul 2023*

Apple Certified Trainer for App Development with Swift | *Apple Inc.* *Jan 2023*

Member of Enrichment Program for Particularly Gifted Students | *EMG Haar* *Jul 2017*