Nikolai Madlener

in | +43 680 2216544 | nikolai@madlener.io | ⌀

EDUCATION

Technical University of Munich   October 2021 – September 2024 (expected graduation)
Master of Science in Informatics (Computer Science)   *Munich, Germany*
  - Focus on Software Engineering, Machine Learning, and Distributed Systems

Peking University   February 2023 – July 2023
General Visiting Student (Semester abroad)   *Beijing, China*
  - Co-organized and spoke at PKU's first Exchange Cafe about LLM's and ChatGPT

Technical University of Munich   October 2017 – June 2021
Bachelor of Science in Informatics (Computer Science)   *Munich, Germany*
  - Minor: Economics | Bachelor Thesis: "How to Build on Top of an Existing Software-System"

EXPERIENCE & INTERNSHIPS

Weavs GmbH   October 2023 – Present
Software Engineer (Working Student)   *Dornbirn, Austria*
  - Development of Citymonitor, an IoT SaaS platform for smart cities using Elixir and Phoenix

Technical University of Munich, Digital Health Group   October 2021 – March 2023
Software Engineer (Academic Assistant)   *Munich, Germany*
  - Development of a navigation iOS app that improves users' fitness and health by supporting multimodal routing
  - Improved average route search performance by over 50%

ALEAS AG   July 2019 – March 2023
Software Engineer (Working Student)   *Ruggel, Liechtenstein / Hybrid*
  - Full stack web application development with .NET for internal and user-facing software with 2500+ active users
  - Development of a cross-platform team-challenge app with React Native and the Firebase platform

Tesla, Inc.   March 2021 – April 2021
Logistics Software System Configuration (Internship)   *Grünheide, Germany*
  - Initial configuration of the material flow software system for intralogistics at the Tesla Giga Berlin factory
  - Requirements engineering and architectural conception based on exchange with material flow planners

PROJECTS & EXPERTISE

Ferienakademie 2022 – "Decentralized Decision Making" | *Swift, SwiftUI, MQTT/Coaty*   September 2022
  - Research summer school in cooperation with Siemens for selected students aimed at exploring innovative ideas
  - Development of a self-organized robot delivery system with focus on decentralized decision making

Swift Tutor | *Swift, SwiftUI, UIKit, Vapor, UML*   2020, 2022
  - Taught iOS development to 70 students at the Swift bootcamp of the practical university course 'iPraktikum'

TUM Campus App Contributions | *Swift, SwiftUI, WidgetKit, REST*   December 2021
  - Extension of the open source TUM Campus app with daily meal plan iOS homescreen widgets for 10+ cantinas

EXTRACURRICULAR EXPERIENCE & AWARDS

hackaTUM 2022 & 2023 Overall Winner   November 2022, November 2023
  - Overall winner of hackaTUM 2022 & 2023, one of EU's biggest hackathons, out of 220 teams (800+ participants)
  - 1st place in the 'City of Munich' 2023 challenge (14 teams) and 2nd place in the 'Sixt' 2022 challenge (20 teams)

MINGA Mentor   August 2022 – February 2023
  - Mentor for incoming exchange students to guide them during their time in Munich and at TUM

SKILLS

Languages: German, English (C1), Chinese (HSK1)
Programming Languages: Swift, Elixir, Java, Go
Frameworks & Tools: SwiftUI, Phoenix, Coaty (MQTT), Firebase, Docker, Git, VS Code, XCode