

# LUKAS KRODINGER

## Research Assistant & Software Engineer

☎ +49 1575 2636100 | ✉ [lukas.krodinge@gmail.com](mailto:lukas.krodinge@gmail.com) | [in LinkedIn](#) | [GitHub](#) | 📍 Munich, Germany | `</>` Python, Java

### EDUCATION

#### University of Passau

Master of Science in Computer Science

Passau, Germany

Oct. 2021 – Mar. 2024

- Grade: 1.3 (German)  $\approx$  3.7 (USA GPA)
- Focus area: Programming and Software Engineering
- Master's Thesis: [Advancing Code Readability: Mined & Modified Code for Dataset Generation](#) (Grade: 1.0/1.0)

#### RMIT

Semester Abroad

Melbourne, Australia

Jul. 2022 – Nov. 2022

#### University of Passau

Bachelor of Science in Computer Science

Passau, Germany

Oct. 2018 – Aug. 2021

- Grade: 1.4 (German)  $\approx$  3.6 (USA GPA)

### EXPERIENCE

#### University of Passau

Research Assistant, [Chair of Software Engineering II](#)

Passau, Germany

Sep. 2024 – Present

- Researching and developing novel automated test generation techniques for Python ([Publications](#))
- Maintaining [Pynguin](#), a Python test generation framework
- Organized a seminar on AI-Assisted Software Quality and mentored 10 students on their B.Sc. and M.Sc. theses

#### Self-Employed

Web Developer

Riedlhuette, Germany

May 2019 – Present

- Designed and built 11 customized websites for companies and associations: [Webdesign-Krodinge.de](#)
- Built and deployed a custom full-stack application for specialized time recording using React, Next.js, and Spring Boot (with JPA), reducing administrative overhead by 80% through automation of manual invoice creation
- Client acquisition, contract negotiation, and project management

#### Deggendorf Institute of Technology

Working Student

Deggendorf, Germany

Sep. 2018 – Sep. 2020 (Semester Breaks)

- Developed reusable components for progressive web apps using Angular
- Implemented front-end features for a native Android app using Ionic and Angular

### AWARDS

#### Hans-Böckler-Stiftung

Selected as one of 500 students nationwide for the Hans-Böckler-Stiftung scholarship, awarded for outstanding academic performance and social commitment

Apr. 2020 – Mar. 2024

#### Deutschlandstipendium

Selected as one of 30,000 students nationwide for the Deutschlandstipendium, a merit-based scholarship awarded for outstanding academic performance

Oct. 2019 – Mar. 2020

### SKILLS

**Languages:** German (Native), English (C1)  
**Programming:** Python, Java, TypeScript/JavaScript, SQL  
**Tools:** Git, Docker/Podman, Slurm, GitHub/GitLab Actions  
**Frameworks:** React, Next.js, Spring Boot (and JPA), Angular, Ionic

### RESEARCH INTERESTS

- Improving software development efficiency by studying and enhancing automated test generation
- Comparative analysis of LLM-based/agentic test generation and Search-Based Test Generation for Python on closed-source Python code
- Integrating automatically generated tests into codebases and studying selection to ensure maintainability