

BIRUK AMARE

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🌐 [birukamare.com](https://www.birukamare.com)

🏠 Permanent Residence: *Germany*

WORK EXPERIENCE

Software Developer

NördlicheDigitale GmbH

📅 Jun. 2022 – Jun. 2023

📍 Bremen, Germany

- Developed and enhanced software solutions for B2B e-commerce platforms, including the implementation of new product search pages and additional feature integrations.
- Front- and Back-end support using AngularJS/TypeScript, Java, Spring and Celum.
- *Tech Stack:* AngularJS/Typescript, Java, Spring, HTML, CSS, Ant, Docker, XML, RESTful Services, Postman, IntelliJ IDEA, MySQL, Nginx, CLI, Git, Jira, Confluence.

Software Developer

Fricke Group

📅 Oct. 2018 – Sep. 2020

📍 Bremen, Germany

- Facilitated the migration to vertical-based development of different E-commerce subsidiaries.
- Developed object-oriented applications in Java, following SOLID, CI/CD, and clean code practices.
- Enhanced product detail pages by integrating new features using pattern library components.
- Managed installation, customization, and documentation processes.
- *Tech Stack:* Java, Coffeescript, HTML, CSS, NodeJS, ExpressJS, Mocha, Ant, Jenkins, XML, Spring, RESTful Services, Postman, IntelliJ IDEA, Apache SOLR, MySQL, MongoDB, jQuery, Nginx, Microservices, CLI, Git, Jira, Confluence.

WORK-STUDY EXPERIENCE

Master Thesis

Friedrich-Alexander-Universität Erlangen-Nürnberg

📅 Feb. 2024 – Sep. 2024

📍 Erlangen, Germany

- Developed and optimized high-performance computing schemes within an LLVM-based compiler framework.
- Utilized a C++ based API to write IR programmatically, enabling the development of custom tools and targeted optimizations.
- Designed and optimized low-level FIR filters for efficient hardware utilization.
- Integrated various HPC techniques to maximize computational power.
- *Tech Stack:* C++, C, Python, Make, CMake, LLVM, MLIR, MPI and OMP, Shell, CLI, Linux, Git.

Working Student

Fraunhofer-Institut für Integrierte Schaltungen

📅 Dec. 2021 – Apr. 2022

📍 Erlangen, Germany

- Collaborated on a sentiment analysis (NLP) platform, enhancing the interface for a smoother user experience.
- Extended backend components and improved frontend visualizations to support efficient sentiment labeling workflows.
- *Tech Stack:* Docker, Vue.js, HTML, CSS, Python, Django, Jira and Confluence.

Teaching Assistant

Jacobs University

📅 Feb. 2016 – Jun. 2018

📍 Bremen, Germany

- Assisted in teaching, tutoring and grading for various courses like Communications, Communications Lab, Electronics, Electronics Lab, Digital Signal Processing and Applied Mathematics Lab.

Student Assistant

Max Planck Institute for Marine Microbiology

- Created Window Plugins for the Leaflet.js open source webGIS library.
- Developed object-oriented applications in JavaScript.
- Wrote user guides for the web tools developed.
- *Tech Stack*: JavaScript, Git and Gitbook.

📅 May. 2016 – Aug. 2016

📍 Bremen, Germany

EDUCATION

M. Sc. | *Computer Science*

Friedrich-Alexander-Universität Erlangen-Nürnberg

Università della Svizzera italiana

📅 Oct. 2020 – Present

📍 Lugano, Switzerland

📍 Erlangen, Germany

B. Sc. | *Electrical and Computer Engineering*

Jacobs University

📅 Sep. 2015 – Aug. 2018

📍 Bremen, Germany

SKILLS

Programming Languages: Java, TypeScript, PHP, Python, C++, C

Frameworks & Libraries: NodeJS, ExpressJS, AngularJS, Django, Spring, REST, Leaflet.js

Databases & Data Management: MySQL, PostgreSQL, MongoDB, Apache SOLR

Tools & Platforms: VS Code, Docker, IntelliJ IDEA, Jira, Confluence, Postman, Eclipse, Celum

Build Tools: Ant, Maven

Version Control & CI/CD: Git, Jenkins, Continuous Integration/Continuous Delivery (CI/CD)

Methodologies & Practices: Clean Code, SOLID, Test-Driven Development (TDD), Behavior-Driven Development (BDD), Microservices, Design Patterns

Web Technologies: HTML, CSS, TypeScript, Coffeescript, JQuery, XML, Nginx

Operating Systems & CLI: Linux, Unix Terminal, MacOS, Shell Scripting

Testing: JUnit, Mocha, Integration testing

Languages: English: Fluent (C2) · German: Advanced (B2)