

Marcel Stolin

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RECENT WORK EXPERIENCE

- Software Engineer (Working Student and Master Thesis)** Stuttgart, Germany
ETAS GmbH, Advanced Engineering Apr. 2023 - Dec. 2024
- Master thesis: *Paving the way for Safe and Portable Software Components for the Software-Defined Vehicle using Rust and WebAssembly*
 - Researched zero-copy IPC for WebAssembly within the software-defined vehicle space
 - Benchmark automation for automotive software on different embedded systems using perf and Python
- Research Assistant** Stuttgart, Germany
Fraunhofer IPA Sep. 2020 - Jun. 2021
- Bachelor thesis: *Automated Deployment of Machine Learning Applications on a Scalable Heterogeneous GPU-Accelerated Apache Spark Cluster*
 - Researched high performance computing clusters for machine learning
- Data Engineer (Internship and Working Student)** Renningen, Germany
Robert Bosch GmbH, Bosch Center for Artificial Intelligence May 2019 - Sep. 2020
- Built an automated CI/CD pipelines on GitLab, to publish Big Data applications on a Microsoft Azure cloud environment
 - Developed ETL pipelines using Apache Kafka and Scala
- Data Engineer (Internship)** Sunnyvale, CA, USA
Robert Bosch LLC, Bosch Center for Artificial Intelligence Oct. 2018 - Mar. 2019
- Added sanity checks to the CI/CD pipelines of Big Data applications
 - Increased the build-time of a Big Data platform multi-module Scala project by 30%

EDUCATION

- Master of Science, Computer Science** Trento, Italy
University of Trento 2021 - 2025
- Current Grade: 28.67 out of 30.0
 - Relevant Coursework: Advanced Programming, Autonomous Software Agents, Distributed Systems 1, Introduction to Computer and Network Security, Security Testing, Web Architectures, Blockchain, Service Design and Engineering
- Bachelor of Science, Mobile Media** Stuttgart, Germany
Stuttgart Media University 2016 - 2021
- Final Grade: 2.0 out of 6.0 (best possible grade: 1.0)
 - Relevant Coursework: Advanced Programming in C++, Algorithms and Data Structures, Artificial Intelligence, Database Systems 1, Functional Programming, Software Development 1+2, Web Development 1+2

PROJECTS

- Computing within Limits 2022 (Conference Paper)** 2022
Co-authored a paper where we built a concept of a low-energy Kubernetes cluster (*reCluster*) of old commodity hardware.
(computingwithinlimits.org/2022/papers/limits22-final-Angeli.pdf)
- Wishlist Inviter (Course Project)** 2023
Built a web application in Go and Python following the microservice architecture that scraps Amazon wishlists using BeautifulSoup.
(github.com/mstolin/wishlist-inviter)

SKILLS

Programming Languages: Rust, Go, Python, Java, C/C++
Tools: Ansible, Docker, Git (GitHub + GitLab), Linux, Packer, Podman, WebAssembly
Languages: German (native language), English (C1), Italian (A1b)
Certificates: Introduction to DevOps and Site Reliability Engineering (edX, 2021), Machine Learning Engineer Nanodegree (Udacity, 2020)