

Timo Nicolai

Born Aug 1994, German

Pfotenhauerstraße 13
01307 Dresden

Phone: +49 1590 2130817

Email: timo.nicolai94@gmail.com

Website: Time0o.github.io

GitHub: github.com/Time0o



EDUCATION

TU Dresden: Diplom (B.Sc. + M.Sc.) Information Systems Eng., GPA: 1.1/1.0

Oct 2016 – (July 2021)

TU Dresden: Undergraduate Studies in Electrical Eng.

Oct 2014 – Oct 2016

KTH Stockholm: Exchange Studies in Electrical Eng. and Computer Science

Jan 2019 – June 2019

Fördegymnasium Flensburg: Abitur (High School Diploma), GPA: 1.0/1.0

Aug 2005 – June 2014

WORK EXPERIENCE

Kernkonzept GmbH, Dresden: Software Engineering Intern

June 2019 – Oct 2019

- Developed a guest debugger extension for the uvmm hypervisor using C++

ZEISS Corporate Research and Technology, Jena: R & D Intern

Aug 2018 – Dec 2018

- Worked with agile team on defect detection machine learning research project
- Used Python for data acquisition/analysis and training of neural networks

Kernkonzept GmbH, Dresden: Student Employee

Sep 2017 – July 2018

- Implemented tests for the L4Re operating system using C++ and Google Test
- Created a Lua tool for verification of L4Re startup scripts
- Improved analysis of benchmark data with custom Python library

Center for Advancing Electronics, Dresden: Student Assistant

Feb 2017 – Sep 2017

- Developed a Linux backend for a distributed computing framework using C

SONOTEC GmbH, Halle (Saale): R & D Intern

Feb 2016 – Sep 2016

- Developed IMU position estimation algorithms with MATLAB
- Built and programmed ARM microcontroller based hardware prototype boards

PROJECTS (Full list at: Time0o.github.io/#projects)

MPSym: Map Tasks to Multicore Systems: github.com/mpsym

- Uses computational group theory to efficiently map tasks to cores
- Implemented in C++ with bindings to Python

CPPBind: Generate C++ Bindings: github.com/Time0o/CPPBind

- Uses Clang's LibTooling library to generate C and Lua bindings to C++ code
- Extensible to new languages via a Python API

TECHNICAL SKILLS

- Programming Languages: C, C++, Python, Haskell, Lua, Bash, Assembly, Verilog
- Tools and Technologies: Linux, Git, Make, CMake

LANGUAGES

German: native, English: fluent

REFERENCES

Available on request