# Ronny Brendel

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automaton2000.com

#### Work Experience

2015-today

TU Dresden, Center for Information Services and High Performance Computing Researcher

Advancing software performance analysis for highly parallel applications. Goals:

Replacing post-mortem analysis by online analysis

Furthering comparative analysis

2012-2013

TU Dresden, Chair for Algebraic and Logical Foundations of Computer Science Student Assistant

Instructor for two exercises: Theoretische Informatik und Logik, and Advanced Logic

Development of novel synchronization algorithms

2007-2012

TU Dresden, Center for Information Services and High Performance Computing Computer Scientist

Development of an architecture for analysing highly parallel programs - Vampir - vampir.eu

Assistance in organizing and coordinating the development process

Contributions to Open Trace Format, VampirTrace, and multiple small projects

Co-authorship of the publications Introducing the Open Trace Format (OTF), Memory Allocation Tracing with VampirTrace, and Trace File Comparison with a Hierarchical Sequence Alignment Algorithm

#### Education

Diplom-Informatiker (equivalent to Master's degree in Computer Science), TU Dresden Minor subject: Discrete Mathematics, Algebra & Geometry

2013 Semester abroad, Vienna UT

2007 Computer Scientist Specialized in Application Development (formal training), TU Dresden

2004 Abitur (equivalent to A-level), Franziskaneum grammar school, Meißen

#### **Technical Skills**

Languages: C, C++, C++11/14, Go, Python, Java, Haskell, Lisp, and many more

Libraries: Qt, STL, OpenMP, Message Passing Interface, Django

Tools: Vim, Bash, Git, numerous \*nix tools, Valgrind, IATEX, TikZ, Visual Studio Topics: High Performance Computing, Formal Methods, Algorithms, API-, UI design

### Interests & Activities

C++11/14, discrete mathematics, software performance analysis, becoming a better developer Personal programming projects: github.com/hydroo

I solved 136 mathematical programming problems: projecteuler.net/profile/hydro.png Recreation: swimming, running, reading, gaming, IT- and business news

## Languages

German (native), English (fluent)