

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
Author of the publication *Structural Clustering: A New Approach to Support Performance Analysis at Scale*
- 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-author of the publications *Introducing the Open Trace Format (OTF)*, *Memory Allocation Tracing with VampirTrace*, and *Trace File Comparison with a Hierarchical Sequence Alignment Algorithm*
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Education

- 2015 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
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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, L^AT_EX, 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 150 mathematical programming problems: projecteuler.net/profile/hydro.png

Recreation: running, reading, gaming, IT- and business news

Languages

German (native), English (fluent)