

David Kräutmann

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Education

M.Sc. Computer Science, *RWTH Aachen University*. 2017–2019
B.Sc. Computer Science, *RWTH Aachen University*, 2014–2017
Thesis: Refining heap-shape information in Java using reachable types [4].

Work experience

IT operations, *Dan & L GmbH*, Mönchengladbach. 2008–
Planning and maintaining a virtualized Windows/Linux small-business IT infrastructure
Developer/DevOps, *StriveWire GmbH*, Hamburg. 2015–2016
Node.js developer role, took on DevOps duties after migrating our entire infrastructure to AWS for scalability reasons and implementing various much-needed monitoring tools.
Teaching assistant (linear algebra), *RWTH Aachen*. 2015
Research assistant (Verification), *RWTH Aachen*. 2016

Languages

German: native
English: fluent
Russian: proficient

Skills

Preferred: Haskell
Known: AWS, Postgres, various imperative languages, Scala, mathematical optimization, ...
Basic: Ansible, Coq, HTML, Shell, ...

Interests

CS-related: Functional programming, mathematical optimization, high-performance computing, type and category theory

Open source contributions

- GHC [2] – multiple; see [1]

Coursework

- Fastest implementation of a conjugate gradient algorithm in a competition between Bachelor students [3]

- Seminar paper about integration of Satisfiability-modulo-theories (SMT) solvers into Coq

Extracurricular work

- Teaching Haskell via a workshop-esque format at RWTH Aachen (organized mostly by myself)

Links

- 1 GHC commits. <https://github.com/ghc/ghc/commits/master?author=KaneTW>.
- 2 Glasgow Haskell Compiler (GHC). <http://haskell.org/ghc>.
- 3 HPC competition (German only). <http://www.hpc.rwth-aachen.de/teaching/lab/ss15index.php>.
- 4 David Kraeutmann. Refining heap-shape information in Java programs using reachable types. Bachelor thesis, RWTH Aachen University, 3 2017. https://kane.cx/downloads/dkr_thesis_final.pdf.