Aaron B. Todd

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8 Haviland St. Apt B
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Education

B.A. in Computer Science, Grinnell College   *May 2011*

M.S. in Computer Science, Indiana University Bloomington   *May 2013*
- Recieved as part of the PhD program, dropped out December 2013.
- Research focus on programming language theory and parallelism.

Work Experience

Bridgewater Associates, Westport, CT   *Jan 2014 - Present*
Senior Software Developer
- All work in Scala.
- Implemented features for economics research platform used by investment associates.
- Built optimization algorithms for trade generation pipeline in account management department.
- Designed and implemented domain specific language for algo developers to use.
- Mentored junior developers and instructed the team in functional programming concepts.

Mozilla, Mountain View, CA   *Summer 2013*
Research Engineering Intern
- Worked on implementation of green thread runtime with workstealing scheduler.
- Implemented directly in Rust.

Academic Experience

PL Wonks   *August 2013 - December 2013*
Indiana University Bloomington
Research Assistant
- Adviser Ryan Newton.
- Researched deterministic parallel programming working in the Haskell.
- Work on a deterministic parallel merge sort published at PLDI 2014.

Pervasive Technology Institute   *August 2011 - May 2013*
Indiana University Bloomington
Research Assistant
- Adviser Beth Plale.
- Implemented REST API abstracting over compute resources in Scala and Akka for the HathiTrust Research Center.

Publications

Kuper, L., Todd, A., Tobin-Hochstadt S., Newton, R.R. **Taming the Parallel Effect Zoo, Extensible Deterministic Parallelism with LVish** *PLDI '14*

Kowalczyk, S. T., Sun, Y., Peng, Z., Plale, B., Todd, A., Auvil, L., Willis, C., Zeng, J., Pathirage, M., Liyanage, S., Ruan, G., Downie, J. S. **Big Data at Scale for Digital Humanities: An Architecture for the HathiTrust Research Center** *Big Data Management, Technologies, and Applications, Wen-Chen Hu and Naima Kaabouch (eds)* Book Chapter, IGI Global, 2013

Computer Skills

<u>Languages:</u>	Scala, Scheme, SQL, Rust, C, Haskell
<u>Preferred Tools:</u>	Linux, Git, Emacs, i3wm, IntelliJ