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STATEMENT I'm a software engineer with a background in data sciences and web development. Having spent the last 2 years in a PhD program developing formal models of compilers, I'm excited to return to the engineering world with sharpened analytical abilities. I'm looking to join a development team that builds well-measured software, is discerning about their tooling, and places precedence on their development process.

EDUCATION

Northeastern University, Boston, MA *2012 – 2014*
 MS in Computer Science, *December 2014*
 Focus: Programming Languages
 Advisor: Amal Ahmed

University of Utah, Salt Lake City, UT *2008 – 2011*
 BS with honors in Computer Science, *December 2011*

TECHNICAL SKILLS **Languages:** Python, Java, JavaScript, C, Haskell, Racket

PROGRAMMING & RESEARCH EXPERIENCE

Research Assistant, University of Utah, UT *Summer 2012*
 Built a static analyzer capable of statically verifying permission usage of Android applications. The analyzer targeted Dalvik byte-code and supported higher-order control flow.

Software Engineer, Space Monkey, UT *Summer 2012*
 Developed device monitoring software in Node.js in between my undergraduate and graduate studies.

Software Engineer Intern, Google, Santa Monica, CA *2011*
 Built a domain name classifier to enforce policy violations and developed internal analytics scripts.

Visiting Research Student, Institute for Theoretical Physics, ETH Zürich *2010*
 Worked with Computational Physicists to create useful data management tools. Surveyed the field of Randomness Extractors and explored possible implementation designs for use in Monte Carlo simulations.

Research Undergrad, Scientific Computing and Imaging Institute, UT *2009 – 2010*
 Lead developer of an online visualization repository which leveraged the VisTrails system to foster collaboration and enable scientists to easily present and share their visualizations. Developer for the VisTrails open-source provenance and workflow management system.

PUBLICATIONS	A Provenance-Based Infrastructure to Support the Life Cycle of Executable Papers	<i>ICCS 2011</i>
	D. Koop, E. Santos, P. Mates, H. Vo, P. Bonnet, B. Bauer, B. Surer, M. Troyer, D. Williams, J. Tohline, J. Freire and C. Silva. <i>International Conference on Computational Science</i>	
	CrowdLabs: Social Analysis and Visualization for the Sciences	<i>SSDBM 2011</i>
	P. Mates, E. Santos, J. Freire and C. Silva <i>International Conference on Scientific and Statistical Database Management</i>	
	The ALPS project release 2.0: Open source software for strongly correlated systems	<i>JSTAT 2011</i>
	B. Bauer et al. (ALPS collaboration). <i>Journal of Statistical Mechanics: Theory and Experiment</i>	
	Towards Supporting Collaborative Data Analysis and Visualization in a Coastal Margin Observatory	<i>CSCW 2010</i>
E. Santos, P. Mates, E. Anderson, B. Grimm, J. Freire and C. Silva <i>Workshop on The Changing Dynamics of Scientific Collaboration</i>		
TALKS	Kripke Logical Relation for Affine Functions: The Story of a Free Theorem in the Presence of Non-termination	<i>Sept. 2013</i>
The 2nd ACM SIGPLAN Workshop on Higher-Order Programming with Effects, Boston, MA		
POSTERS	Analyzing Android Applications with Abstract Interpretation	<i>ICFP 2012</i>
Student Research Competition		
TEACHING EXPERIENCE	Teaching assistant , CS2500 <i>Introduction to Programming and Computing</i>	<i>2012,2014</i>
Introductory undergraduate CS course at Northeastern University modeled off of “How to Design Programs”.		