

## Andrew M. Kent

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CONTACT INFORMATION	Lindley Hall 215 Indiana University 150 S. Woodlawn Ave. Bloomington, IN 47405	<i>E-mail:</i> andmkent@iu.edu <i>Fax:</i> (812) 855-4829 <i>Github:</i> github.com/pnwamk <i>WWW:</i> pnwamk.github.io
RESEARCH INTERESTS	I am interested in developing programming language based techniques that help developers design and build robust software in real world settings. In particular, I am interested in making advanced type-theoretic verification and design techniques more accessible to developers of all levels.	
SKILLS	Research in programming language theory and formal logic, functional and imperative programming, experience with the Unix environment and a variety of programming languages/tools (Racket, Coq, C/C++, Agda, Java, Python, git, etc).	
EDUCATION	<b>Indiana University</b> , Bloomington, Indiana USA Ph.D. Student, Computer Science, May 2014 - Present GPA: 3.867 Advisor: Sam Tobin-Hochstadt  <b>Brigham Young University</b> , Provo, Utah USA B.S., Computer Science, graduated <i>magna cum laude</i> , August 2013	
PUBLICATIONS	Occurrence Typing Modulo Theories, with David Kempe and Sam Tobin-Hochstadt, <i>Proc. 37<sup>th</sup> ACM Conference on Programming Language Design and Implementation (PLDI)</i> , 2016. Included successfully evaluated artifact.  Design and Evaluation of Gradual Typing in Python, with Michael M. Vitousek, Jeremy G. Siek, and Jim Baker, <i>Proc. 10<sup>th</sup> ACM Symposium on Dynamic Languages (DLS)</i> , 2014.  Linking the Past: Discovering Historical Social Networks from Documents and Linking to a Genealogical Database, with Douglas J. Kennard and William A. Barrett, <i>Proc. 1<sup>st</sup> Workshop on Historical Document Imaging and Processing (HIP)</i> , 2011.	
ACADEMIC EXPERIENCE	<b>Indiana University</b> , Bloomington, Indiana USA <i>Graduate Research Assistant</i> <span style="float: right;"><b>May 2014 – Present</b></span> Investigating type-based program verification, evaluating gradual typing applications in mainstream languages, and developing techniques to bring dependent types to dynamically typed languages. Advised by Sam Tobin-Hochstadt.  <i>Assistant Instructor</i> <span style="float: right;"><b>January 2016 – Present</b></span> <i>CSCI-B 522 and CSCI-B 401</i> Assisted with instruction and grading for a graduate level programming language theory course and an undergraduate level course on the theory of computation.  <b>Brigham Young University</b> , Provo, Utah USA <i>Graduate Research Assistant</i> <span style="float: right;"><b>August 2013 – April 2014</b></span> Investigated the formalization of security protocol analysis techniques (Strand Spaces) utilizing the Coq proof assistant to create a verified basis for accessible, automated protocol analysis techniques. Advised by Jay McCarthy.	

	<i>Undergraduate Research Assistant</i> Developed method for automatically generating historical social networks from source documents to aid historical research. Advised by William Berret and Tom Sederberg.	<b>May – September 2011</b>
TALKS	Practical Dependently Typed Racket, RacketCon 2015, St. Louis, MO, USA.  Adding Practical Dependent Types to Typed Racket, Scripts to Programs Workshop 2015, Prague, Czech Republic.	
PROFESSIONAL EXPERIENCE	<b>Microsoft Corporation</b> , Redmond, Washington USA <i>Software Development Engineer Intern</i> Explored optimizations and improvements for Microsoft OneNote during a summer internship, receiving a full-time offer for employment upon completion.	<b>May 2012 – August 2012</b>
	<b>United States Marine Corps</b> , Camp Pendleton, California USA <i>Signals Intelligence Analyst</i> Provided detailed signals intelligence analysis and reporting in support combat operations in the Al Anbar province of Iraq during two separate deployments. Additionally, trained and led a team of six signals intelligence analysts during the second deployment to Iraq.	<b>November 2005 – August 2010</b>
OPEN SOURCE INVOLVEMENT	<i>Racket and Typed Racket</i> Contributions to the Racket programming language, especially Typed Racket.	<b>2014 – Present</b>
COMMUNITY	<i>Cub Master</i> Help organize combined scouting activities for youth ages 8-11.	<b>December 2014 – Present</b>
	<i>Interfaith Winter Shelter Volunteer</i> Evening shift volunteer for at a low-barrier winter homeless shelter.	<b>January 2016 – Present</b>