

Peng Fu - Curriculum Vitae

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Education

- Ph.D. Department of Computer Science, the University of Iowa, Iowa City, USA.
Dissertation: Lambda Encoding in Type Theory, Advisor: Aaron Stump
Expected graduation: July 2014.
- B.Eng. School of Computer Science, Huazhong University of Science and Technology, Wuhan, China. July 2009.

Research Areas

Lambda calculus and type theory, with applications to interactive theorem proving and functional programming language.

Publications

- “A Framework for Internalizing Relations into Type Theory”. Peng Fu, Aaron Stump, Jeff Vaughan. Accepted. PSATTT’11: International Workshop on Proof-Search in Axiomatic Theories and Type Theories (2011).
- “Irrelevance, Heterogeneous Equality, and Call-by-value Dependent Type Systems”. Vilhelm Sjöberg, Chris Casinghino, Ki Yung Ahn, Nathan Collins, Harley D. Eades III, Peng Fu, Garrin Kimmell, Tim Sheard, Aaron Stump, Stephanie Weirich. MSFP 2012.
- “Equational Reasoning about Programs with General Recursion and Call-by-value Semantics”. Garrin Kimmell, Aaron Stump, Harley D. Eades III, Peng Fu, Tim Sheard, Stephanie Weirich, Chris Casinghino, Vilhelm Sjöberg, Nathan Collins, Ki Yung Ahn. PLPV 2012.
- “Equational Reasoning about Programs with General Recursion and Call-by-value Semantics”. Garrin Kimmell, Aaron Stump, Harley D. Eades III, Peng Fu, Tim Sheard, Stephanie Weirich, Chris Casinghino, Vilhelm Sjöberg, Nathan Collins, Ki Yung Ahn. Progress in Informatics, No. 10, March 2013, pages 19-46. Journal version of PLPV ’12 paper.

Selected Talks

- “A Framework for Internalizing Relations into Type Theory”. August 2011, PSATTT workshop, Wroclaw. Poland.
- “Dependent Lambda Encoding with Self Types”. September 2012, Midwest Verification Days, Lawrence, KS.
- “Lambda Encoding, Types and Confluence”. May 2013, Ph.D. Comprehensive Exam, Iowa City, IA.
- “Dependent Lambda Encoding with Self Types”. September 2013, ACM SIGPLAN Workshop on Dependently-Typed Programming(DTP), Boston, MA.

Academia Expereince

- Research Assistant, Supervisor: Aaron Stump, 2010 spring- 2013 summer. Department of Computer Science, The University of Iowa.
- Teaching Assistant, “Programming Language Concepts”, 2014 Spring. Department of Computer Science, The University of Iowa.
- Teaching Assistant, “Object-Oriented Software Development ”, 2013 Fall. Department of Computer Science, The University of Iowa.
- Teaching Assistant, “Programming Language Concepts”, 2013 Spring. Department of Computer Science, The University of Iowa.
- Teaching Assistant, “Computer Networking”, 2009 Fall. Department of Computer Science, The University of Iowa.