

# Peng Fu - Curriculum Vitae

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## Education

- Ph.D. Department of Computer Science, the University of Iowa, Iowa City, USA. Expected June 2014.
- B.Eng. School of Computer Science, Huazhong University of Science and Technology, Wuhan, China. July 2009.

## Research Areas

Type theory à la Curry and lambda calculus, with applications to interactive theorem proving and functional programming language.

## Dissertation Topic

“Lambda Encoding in Type Theory à la Curry”, Peng Fu, expected to defend in June, 2014.

## Publications

1. “A Framework for Internalizing Relations into Type Theory” Peng Fu, Aaron Stump, Jeff Vaughan.  
PSATTT’11: International Workshop on Proof-Search in Axiomatic Theories and Type Theories (2011).
2. “Church Encoding with Dependent Type”, Peng Fu, Aaron Stump. planning.
3. “Dependently-typed Programming with Scott Encoding ” Peng Fu, Aaron Stump. planning.

## Selected Talks

1. “A Framework for Internalizing Relations into Type Theory”, August 2011, PSATTT workshop, Wrocław. Poland.
2. “Dependent Lambda Encoding with Self Types”, September 2012, Midwest Verification Days, Lawrence, KS.

3. “Lambda Encoding, Types and Confluence. ”, May 2013, Comprehensive Exam, Iowa City, IA.
4. “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, “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.