Zoe Paraskevopoulou

Personal Date of birth: 31 July 1990 Webpage: zoep.github.io

Information Citizenship: Greek Email: zoe.paraskevopoulou@princeton.edu

EDUCATION PhD in Computer Science, Princeton University

September 2015 to Present

Area: Programming Languages

Master's Degree

September 2014 to September 2015

Master Parisien de recherche en Informatique, École Normale Supérieure de Cachan, France

Level: M2

Specialization: Logics and Semantics of Programs

Thesis: Self-Adgusting Computation for CostIt, Grade: 19/20

Courses:

• Foundations of proof systems

• Linear logic and logical paradigms of computation

• Automated deduction

• Abstract interpretation

• Proof assistants

• Functional programming and type systems

• Proofs of programs

 Semantics, languages and algorithms for multicore programming

Diploma (5-year degree)

September 2008 to September 2014

School of Electrical and Computer Engineering, National Technical University of Athens, Greece

Majors: Computer Software, Computer Systems

Minors: Mathematics, Computer Networks

Thesis: A Coq Framework For Verified Property Based Testing, Grade: 10/10 Thesis Committee: Nikolaos Papaspurou, Kostis Sagonas, Yannis Smaragdakis

RESEARCH EXPERIENCE **Research Internship** at Max Planck Institute of Software MARCH 2015 to August 2015 Systems

• Topic: Self-Adjusting Computation for CostIt

• Advisor: Deepak Garg

Research Internship at INRIA Paris-Rocquencourt April 2014 to September 2014

• Topic: QuickChick: A Coq Framework For Verified Property Based Testing

• Advisor: Cătălin Hriţcu

• Team: Prosecco

PUBLICATIONS

Foundational Property-Based Testing.

Zoe Paraskevopoulou, Catalin Hritcu, Maxime Dénès, Leonidas Lampropoulos and Benjamin C. Pierce. In 6th International Conference on Interactive Theorem Proving (ITP), 2015.

Workshop Talks A Coq Framework For Verified Property-Based Testing (Extended Abstract).

Zoe Paraskevopoulou, Catalin Hritcu, Maxime Dénès, Leonidas Lampropoulos and Benjamin C. Pierce. CoqPL 2015.

QuickChick: Property-Based Testing for Coq.

Maxime Dénès, Catalin Hritcu, Leonidas Lampropoulos, Zoe Paraskevopoulou and Benjamin C. Pierce. The 6th Coq Workshop. July 2014.

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| SCHOLARSHIPS AND AWARDS | Stanley J. Seeger Hellenic Studies Prize | 2015 |
|----------------------------|---|------|
| | KARY Award Award for excellent academic performance for the academic year 2012-2013 | 2014 |
| | Selected for scholarship for attending PLMW at POPL 2015. | 2014 |
| | INRIA-MPRI Scholarship 1 year scholarship for attending the MPRI program | 2014 |

1 year scholarship for attending the MPRI program.

Scholarship for attending Applied Functional Programming in Haskell

Summer School, Utrecht University, Netherlands.

Other Courses

Summer School on Applied Functional Programming in Haskell

August 2013

Utrecht University, Netherlands.

Certificates of accomplishment for the following Online Courses:

• Cryptography I March 2013 provided by Standford University through Coursera Inc.

• Software as a Service November 2012 provided by BerkeleyX through edX

Interests

Programming languages theory and implementation, logic, computer security, static analysis, software testing and verification, cryptography

NOTABLE STUDENT PROJECTS

Lambda Calculus Interpreter

November 2013

An interpreter for a typed lambda calculus variant featuring let and let-rec definitions, ifthen-else construct, pairs, various arithmetic, boolean and relative operators, type inference and let-polymorphism. Implemented in Haskell in a team of 2 students.

Llama Compiler October 2013

A compiler for an OCaml-like language with pattern matching, type inference, higher-order functions and user defined data types. The compiler performs control flow graph, peephole and tail call optimizations. Developed in OCaml in a team of 3 students.

Advanced Topics in Database Systems Project

March 2013

A bibliographic report about security and cryptography in database systems, written in a team of 2 students.

Cryptography Project

January 2013

A library implementing basic operations on elliptic curves over prime fields, Elliptic Curve digital signature and Diffie-Hellman key exchange algorithms. Developed in Ocaml in a team of 2 students.

Database Systems Project

February 2012

Design and implementation of a database management system for a fictional airport, following the MVC pattern. Developed using MySQL, PHP, HTML and Javascript in a team of 2 students.

OTHER ACTIVITIES

Music studies at the National Conservatory of Athens.

PianoSEPTEMBER 2008 TO PRESENTChamber MusicSEPTEMBER 2013 TO JUNE 2014Choral ConductingSEPTEMBER 2012 TO JUNE 2014Theory of HarmonizationSEPTEMBER 2011 TO JUNE 2014Music TheorySEPTEMBER 2010 TO JUNE 2011