Zoe Paraskevopoulou

PERSONAL INFORMATION

Webpage: zoep.github.io **Citizenship**: Greek
Email: z.paraskevopoulou@northeastern.edu

EDUCATION

PhD in Computer Science, Princeton University 09/2015 TO 11/2020

Area: Programming Languages

Advisor: Andrew W. Appel

Teaching: *Algorithms and Data Structures* (Spring 2017),
Programming Languages (Spring 2018, Spring 2019)

Master's Degree in Computer Science, *Summa Cum Laude* 09/2014 TO 09/2015

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

Specialization: Logics and Semantics of Programs

Thesis: *Self-Adjusting Computation for CostIt*, advised by Deepak Garg.

Combined BS/MS in Engineering 09/2008 TO 09/2014

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*, advised by Cătălin Hriţcu.

WORK EXPERIENCE

Postdoctoral Research Associate in Computer Science 11/2019 TO PRESENT
Khoury College of Computer Sciences, Northeastern University
Computing Innovation Fellow 2020 (acceptance rate 11%).
Mentor: Professor Amal Ahmed.

Internship at Facebook 06/2019 TO 08/2019

Research Internship at Microsoft Research Redmond 06/2018 TO 08/2018

Research Internship at Microsoft Research Redmond 06/2017 TO 08/2017

Research Internship at Max Planck Institute of Software Systems 03/2015 TO 08/2015

Research Internship at INRIA Paris-Rocquencourt 04/2014 TO 09/2014

SCHOLARSHIPS AND AWARDS

Computing Innovation Fellows 2020 2020
2-year postdoctoral fellowship from Computing Research Association.
Project: Safe language interoperability on top of WebAssembly.
Mentor: Professor Amal Ahmed.

Siebel Scholars Fellowship 2019
Scholarship towards my final year of study at Princeton University

Stanley J. Seeger Hellenic Studies Prize 2015
Scholarship towards my first year of study at Princeton University

Thomaidio Award 2015
For ranking first among the students of my class at NTUA ECE department during the academic year 2012-2013

KARY Award 2014
NTUA award for excellent academic performance for the academic year 2012-2013

INRIA-MPRI Scholarship 2014
1 year fellowship to attend the MPRI master's program.

Publications

Compiling With Continuations, Correctly.
Zoe Paraskevopoulou, and Anvay Grover. In ACM SIGPLAN International Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA), 2021.

Compositional Optimizations for Certioq.
Zoe Paraskevopoulou, John M. Li, and Andrew Appel. In ACM SIGPLAN International Conference on Functional Programming (ICFP), 2021.

Closure Conversion is Safe for Space.
Zoe Paraskevopoulou, and Andrew W. Appel. In ACM SIGPLAN International Conference on Functional Programming (ICFP), 2019.

Meta-F: Proof Automation with SMT, Tactics, and Metaprograms.*
Guido Martínez, Danel Ahman, Victor Dumitrescu, Nick Giannarakis, Chris Hawblitzel, Cătălin Hriţcu, Monal Narasimhamurthy, Zoe Paraskevopoulou, Clément Pit-Claudel, Jonathan Protzenko, Tahina Ramananandro, Aseem Rastogi, and Nikhil Swamy. In European Symposium on Programming (ESOP), 2019.

Generating Good Generators for Inductive Relations.
Leonidas Lampropoulos, Zoe Paraskevopoulou, and Benjamin Pierce. In ACM SIGPLAN Symposium on Principles of Programming Languages (POPL), 2018.

A type theory for incremental computational complexity with control flow changes.
Ezgi Cicek, Zoe Paraskevopoulou, and Deepak Garg. In ACM SIGPLAN International Conference on Functional Programming (ICFP), 2016.

Foundational Property-Based Testing.
Zoe Paraskevopoulou, Cătălin Hriţcu, Maxime Dénès, Leonidas Lampropoulos, and Benjamin C. Pierce. In 6th International Conference on Interactive Theorem Proving (ITP), 2015.

Workshop Papers

ML as a Tactic Language, Again.
Guido Martínez, Danel Ahman, Victor Dumitrescu, Nick Giannarakis, Chris Hawblitzel, Cătălin Hriţcu, Monal Narasimhamurthy, Zoe Paraskevopoulou, Clément Pit-Claudel, Jonathan Protzenko, Tahina Ramananandro, Aseem Rastogi, and Nikhil Swamy. ML 2018.

CertiCoq: A verified compiler for Coq (Extended Abstract).
Abhishek Anand, Andrew Appel, Greg Morrisett, Zoe Paraskevopoulou, Randy Pollack, Olivier Savary Belanger, Matthieu Sozeau, and Matthew Weaver. CoqPL 2017.

Making our Own Luck: A Language for Random Generators (Extended Abstract) .
Leonidas Lampropoulos, Benjamin C. Pierce, Cătălin Hriţcu, John Hughes, Zoe Paraskevopoulou, and Li-yao Xia. PPS 2016.

A Coq Framework For Verified Property-Based Testing (Extended Abstract).
Zoe Paraskevopoulou, Cătălin Hriţcu, Maxime Dénès, Leonidas Lampropoulos, and Benjamin C. Pierce. CoqPL 2015.

QuickChick: Property-Based Testing for Coq.
Maxime Dénès, Cătălin Hriţcu, Leonidas Lampropoulos, Zoe Paraskevopoulou, and Benjamin C. Pierce. The 6th Coq Workshop. July 2014.

Other Courses and Seminars

Dagstuhl Seminar: Secure Compilation. Invited participant. — May 2018

Summer School in Applied Functional Programming in Haskell — August 2013
Utrecht University, Netherlands.

Service

Program Committee, PEPM 2022

Program Committee, CPP 2022

Workshops Co-char, ICFP 2021

Program Committee, PriSC 2021

Program Committee, TFP 2020

Program Committee, ML 2019

External Review Committee, ICFP 2019

Program Committee, TyDe 2018

Program Committee, OCaml 2017

Artifact Evaluation Committee, POPL 2017

Research Interests

verified compilation, language interoperability, proof assistants, program verification, testing