

Nick Giannarakis

Address

41 Spring Street
Princeton, NJ
USA

Born on 30 June 1990

Contact Info

+1 609-454-1943
ng8@princeton.edu

Education

Princeton University

- PhD in Computer Science
- Admission Year - 2015
- Graduation Year - 2020 (expected)

Ecole normale superieure de Cachan

- Parisian Masters of Research in Computer Science (MPRI M2)
- Admission Year - 2014
- Graduation Year - 2015
- Master Thesis - Release-Acquire on POWER

National Technical University of Athens

- School of Electrical and Computer Engineering
- Admission Year - 2008
- Graduation Year - 2014
- GPA - 8.52/10.0
- Thesis - Formally Verified Tag-Based Enforcement of Control Flow Integrity
- Committee - Nikolaos Papaspyrou, Kostis Sagonas, Yannis Smaragdakis

Work

Experience

Amazon.com

- AWS Networking, May 2019 - August 2019
- Worked on SMT-based verification of network control planes

Microsoft Research

- RiSE team, June 2017 - September 2017
- Mentors: Chris Hawblitzel, Nikhil Swamy
- Worked on the F^* program verifier

MPI-SWS

- Prosecco team, April 2015 - September 2015
- Advisor: Viktor Vafeiadis
- Topic : Worked on the semantics of release-acquire and of fences on POWER processors

INRIA Paris-Rocquencourt

- Prosecco team, April 2014 - September 2014
- Advisor: Cătălin Hrițcu
- Worked on formal verification of a tag-based reference monitor for Control-Flow Integrity.

Publications

1. Ryan Beckett, Nick Giannarakis, Devon Loehr, David Walker. NV: An intermediate language for network verification. NetPL 2019.
2. Nick Giannarakis, Ryan Beckett, Ratul Mahajan, David Walker. Efficient verification of network fault tolerance via counterexample-guided refinement. CAV 2019.

3. Guido Martínez, Danel Ahman, Victor Dumitrescu, Nick Giannarakis, Chris Hawblitzel, Cătălin Hrițcu, Monal Narasimhamurthy, Zoe Paraskevopoulou, Clément Pit-Claudel, Jonathan Protzenko, Tahina Ramananandro, Aseem Rastogi, Nikhil Swamy. Meta-F*: Proof automation with SMT, tactics, and metaprograms. ESOP 2019.
4. Aymeric Fromherz, Nick Giannarakis, Chris Hawblitzel, Bryan Parno, Aseem Rastogi, Nikhil Swamy. A Verified, Efficient Embedding of a Verifiable Assembly Language. POPL 2019.
5. Ori Lahav, Nick Giannarakis, Viktor Vafeiadis. Taming release-acquire consistency. POPL 2016.
6. Arthur Azevedo de Amorim, Maxime Dénès, Nick Giannarakis, Cătălin Hrițcu, Benjamin C. Pierce, Antal Spector-Zabusky, and Andrew Tolmach. Micro-Policies: A Framework for Verified, Hardware-Assisted Security Monitors. 2015 IEEE Symposium on Security and Privacy.

Academic Service

- Artifact Evaluation Committee PLDI 2020
- Artifact Evaluation Committee POPL 2018
- Artifact Evaluation Committee POPL 2017

Awards

- Labex Digicosme MPRI scholarship
- Utrecht University summer school scholarship
- Stanley J. Seeger Hellenic Studies Prize