

Nick Spinale

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EDUCATION

CARLETON COLLEGE

MATH/COMPUTER SCIENCE

Sep 2014 – June 2018 | Northfield, MN

GPA: 3.8

Phi Beta Kappa

SELECTED COURSES

Topics in Abstract Algebra

Topics in Elliptic Curves

Programming Languages

Computer Architecture

Operating Systems

Data Mining

Probability Theory

Statistical Inference

Multivariable Calculus

Quantum Computing

RENI INSTITUTE

MATHEMATICS

Aug – Dec 2016 | Budapest, Hungary

GPA: 4.0

COURSES

Mathematical Cryptography

Theory of Computing

Number Theory

Graph Theory

Set Theory

SKILLS

LANGUAGES

Most Comfortable:

Haskell • C • Python • Go

Shell • Java • JavaScript • TeX

Comfortable

OCaml • Coq • Rust • C++

Scheme • SQL • HTML/CSS

ASM (x86, ARM, MIPS) • R

Familiar:

Ruby • Magma • Mathematica

SYSTEMS AND TOOLS

Unix-like environments • Git

GDB • Ghidra • IDA Pro

AWS • Kubernetes • Docker

LINKS

 nickspinale.com
 nick@nickspinale.com
 [linkedin.com/in/nickspinale](https://www.linkedin.com/in/nickspinale)
 github.com/nspin
 [nick_spinale](https://twitter.com/nick_spinale)

EXPERIENCE

ARM RESEARCH | SENIOR RESEARCH ENGINEER

October 2018 – Present | Cambridge, UK

- Design, propose, and execute research projects involving privacy, confidential computing, trusted execution environments, operating systems, and virtualization.

GOOGLE | SOFTWARE ENGINEERING INTERN

June – September 2017 | Sunnyvale, CA

- Collaborated with a number of teams, both internal and external (including Istio and SPIFFE), to push the state of the art of security within service-oriented systems towards mTLS-everywhere.
- Developed a system for securely bootstrapping and managing service identities within the Google Cloud Edge infrastructure.

CARVE SYSTEMS, LLC | HACKNY FELLOW + INTERN

June – December 2016 | New York, NY

- Conducted penetration tests on client systems and products.
- Built tools for discovering vulnerabilities in a variety of systems.
- Maintained servers and services for simulating attacks and streamlining the security assessment and reporting process.

DATRIUM, INC | SOFTWARE ENGINEERING EXTERN

December 2015 | Sunnyvale, CA

- Collaborated with a team of senior engineers and researchers on a cutting-edge virtualized storage system.
- Built a set of utilities for deserializing intermediate data from a long-running space reclamation process.

CARLETON COLLEGE | COMPUTER SCIENCE LAB ASSISTANT

September 2015 – Present | Northfield, MN

- Aid fellow Computer Science students in developing problem solving skills and algorithmic intuition.
- Identify, explain, and help correct bugs in students' Python, Java, C, MIPS, and Scheme programs.

PISMO INVESTMENTS | SOFTWARE ENGINEERING INTERN

June – September 2015 | Waltham, MA

- Contributed to the schematics of an inference engine for modeling and analyzing corporate structure.
- Built and maintained an Enterprise Java backend that interfaced with a relational database and exposed a REST API.
- Designed a web application using Angular.js that demonstrated Pismo's product's modeling capabilities to potential investors.

AWARDS

2014	U.S. Presidential Scholar	U.S. Department of Education
2016	HackNY Fellow	HackNY
2018	David Pollatsek Prize in Computer Science	Carleton College