

# Nick Spinale

nickspinale.com | nick@nickspinale.com | 617.229.5498

## 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*

C++ • R • Scheme • Idris • Nix

SQL • HTML/CSS • VimScript

*Familiar:*

ASM (x86, ARM, MIPS) • Agda

Ruby • Magma • Mathematica

### SYSTEMS AND TOOLS

Unix-like environments • Git

AWS • Kubernetes • Docker

IDA Pro • Radare2 • GDB

## LINKS

-  [nickspinale.com](http://nickspinale.com)
-  [github.com/nspin](https://github.com/nspin)
-  [linkedin.com/in/nickspinale](https://www.linkedin.com/in/nickspinale)
-  [nick@nickspinale.com](mailto:nick@nickspinale.com)
-  617.229.5498

## EXPERIENCE

### ARM RESEARCH | SYSTEM SOFTWARE SECURITY ENGINEER

October 2018 – Present | Cambridge, UK

- Investigating and improving Security, Trust, Correctness, and Privacy in computer systems.

### 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             |