# Nick Spinale

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#### EDUCATION

#### CARLETON COLLEGE

MATH/COMPUTER SCIENCE Sep 2014 – May 2018 | Northfield, MN

Major GPA: 3.98

Selected Courses

Programming Languages Topics in Elliptic Curves

Computer Architecture

Operating Systems

Data Mining

Abstract Algebra

Probability Theory

Statistical Inference

Software Development

Multivariable Calculus

#### RENI INSTITUTE

#### MATHEMATICS

Aug – Dec 2016 | Budapest, Hungary GPA: 4.2

#### Courses

Mathematical Cryptography Theory of Computing Number Theory Graph Theory Set Theory

#### SKILLS

#### **LANGUAGES**

Over 5000 lines:

Haskell • C • Python • Go

Shell • Java • JavaScript • TeX

Over 1000 lines:

R • Scheme/Racket • Nix

HTML/CSS • VimScript

Familiar:

C++ • x86 ASM • Ruby • Bazel

Agda • Magma • Mathematica

#### SYSTEMS AND TOOLS

Unix-like environments • Git Linux (NixOS, Ubuntu, Debain)

AWS • Kubernetes • Docker

AWS • Kubernetes • Dock

Nginx • Drozer • Burp

#### LINKS

nickspinale.com

github.com/nickspinale

in linkedin.com/in/nickspinale

spinalen@carleton.edu

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#### EXPERIENCE

#### GOOGLE | SOFTWARE ENGINEERING INTERN

June 2017 - Present | Sunnyvale, CA

- Develop a system for securely bootstrapping and managing service identities within the Google Cloud Edge infrastructure.
- Collaborate 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.

#### CARVE SYSTEMS, LLC | HACKNY FELLOW + INTERN

June 2016 - December 2016 | New York, NY

- Conducted penetration tests on client systems and products.
- Built tools for automating vulnerability discovering 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.

### COLEGIO SALESIANO DON BOSCO | ENGLISH TEACHER

May – July 2014 | Masaya, Nicaragua

- Taught English classes of up to fifty students from grades four through six in an economically struggling neighborhood.
- Organized, advertised, and led language exchange groups open to the public.
- Assisted in teaching upper-level English to high school students and adults.

# AWARDS

2016 HackNY Fellow HackNY.org

2014 U.S. Presidential Scholar U.S. Department of Education