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

RÉNYI 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:
Rust • Haskell • C • Python • Go
Shell • Java • JavaScript • TeX
Comfortable
OCaml • Coq • C++ • SQL
Scheme • HTML/CSS • R
ASM (x86, ARM, MIPS)
Familiar:
Ruby • Magma • Mathematica

SYSTEMS AND TOOLS
Unix-like environments • Git
GDB • Ghidra • IDA Pro
AWS • Kubernetes • Docker

LINKS

- 🌐 nickspinale.com
- ✉ nick@nickspinale.com
- in linkedin.com/in/nickspinale
- ☺ github.com/nspin
- 🐦 nick_spinale

EXPERIENCE

ARM RESEARCH | SENIOR RESEARCH ENGINEER
October 2018 – February 2022 | Cambridge, UK

- Designed, proposed, led, and executed research projects involving privacy, confidential computing, trusted execution environments, operating systems, and virtualization.

GOOGLE | SOFTWARE ENGINEERING INTERN
June – September 2017 | Mountain View, 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

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