

Nathan Cohen

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EDUCATION

Purdue University

Bachelor of Science in Computer Science
Certificate of Entrepreneurship

West Lafayette, IN

Aug 2017 – May 2021

GPA: 3.79/4.00

EXPERIENCE

Cisco Systems

Software Engineering Intern

San Jose, CA

May 2020 – Aug 2020

- **Causality:** Designed and implemented a root cause analysis library, which was used for detecting failures in routers. Strategies include parsing and evaluating custom expressions across various hierarchical forms of data.
- **Causality UI:** Developed a React front end to display results of a causality graph evaluation.

Discover Financial Services

Software Engineering Intern

Riverwoods, IL

May 2019 – Aug 2019

- **Secure Document Upload:** Implemented backend of account recovery system in Spring Boot application within security spec. Successfully deployed and maintained product with 95% test coverage. Implemented and maintained Jenkins pipeline for code deploy and testing.
- **JWT 2.0:** Refactored legacy API to abide by modern security standards.

Purdue University

Teaching Assistant & Volunteer Work

West Lafayette, IN

May 2018 – Dec 2019

- **CS 18000: Problem Solving and Object-Oriented Programming:** Authored bi-weekly labs for Purdue's introduction to computer science course in Java. Mentored students in completing their work.
- **CS 25100: Data Structures and Algorithms:** Worked as senior undergraduate teaching assistant under Professor Gustavo. Prepared and graded homework and exams, and wrote automated grading bash scripts.
- **Purdue Athletic Life Success Program: Computer Science Instructor:** Organized and directed a 4-week introductory computer science course for students from Lafayette area primary schools.

Alpha Epsilon Pi

Philanthropy Chair

West Lafayette, IN

Sep 2018 – Dec 2019

- Managed year long committee for organization's philanthropy event and raised upwards of \$3,000 dollars for charity.
- Recognized for best philanthropy growth at Alpha Epsilon Pi's International convention.

PROJECTS

UDP Video Stream: Researched and designed a client/server video streaming application over UDP that deconstructs, sends, and reassembles H.264 frames.

Boarding Simulator: Designed multithreaded program to simulate the airbus boarding experience, testing different patterns of order to decrease wait time.

Depend On Me: Built backend for web application performs task managements and scheduling for teams practicing Agile.

LST Scheduler: Developed and implemented a new process scheduler for the XINU operating system which used slack team as means for deciding priority.

RELEVANT COURSEWORK

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|--------------------------------|-----------------------|---------------------|
| • Data Structures & Algorithms | • Computer Networks | • Compilers |
| • Operating Systems | • Information Systems | • Cryptography |
| • Analysis of Algorithms | • Systems Programming | • Computer Security |

PROGRAMMING SKILLS

Languages: C, C++, Python, Java, Scala, Rust, ARM, SQL, PL/SQL, JavaScript

Technologies: GCC, LLVM, LLDB, Spring Boot, JDBC, JUnit, Flask, Jenkins, AWS, LaTeX, ANTLR, React