

# ALEX HAYNES

COMPUTER SCIENCE / UNIVERSITY OF PENNSYLVANIA

## EXPERIENCE

Fall 2019 - Present

### Two Sigma

#### Software Engineer – TSIQ Product Platform

Implemented a rules-based underwriting engine in our DSL compiler, integrated the execution of said rules into existing, and built a test suite in Typescript for programs written in our DSL.

Spring 2017 – Spring 2019

### University of Pennsylvania

#### Teaching Assistant

CIS 240 Computer Systems, CIS 331 Networks & Security, CIS 380 Operating Systems, CIS 548 Operating Systems (Graduate Level)

Summer 2018

### Two Sigma

#### Software Engineering Intern

Created data processing pipelines and visualizations of time-series financial data for a forensic analysis tool used by the compliance team.

Summer 2017

### Slack

#### Front-End Engineering Intern

Contributed to keyboard navigation feature in web and desktop client. Created keyboard shortcuts side pane using React. Created system to detect keyboard navigation users and intro them to other keyboard shortcuts.

Summer 2016

### VinSolutions

#### Software Engineering Intern

Developed DevOps web portal using ASP.NET MVC and Entity Framework I developed the database, RESTful API and front-end

## ACTIVITIES

### Py-libp2p – [github.com/libp2p/py-libp2p](https://github.com/libp2p/py-libp2p)

#### Ethereum Foundation Funded Networking Library

Modular networking library intended to enable app development against peer-to-peer networks. Our project received a \$40,000 grant from the Ethereum Foundation and First Runner Up prize in the UPenn SEAS Senior Design Challenge. Py-libp2p is being used to day as the networking layer in Python based ETH2 clients.

### UPenn Ski Team

Member

### Dining Philosophers (Computer Science Club), UPenn

Member

## EDUCATION

8/2015 – 5/2019

### Computer Science (GPA: 3.70)

#### Triple Minor: Math, Data Science, Fine Arts

University of Pennsylvania, Philadelphia, PA

8/2011 – 5/2015

### Kansas Scholars Curriculum (GPA: 4.11; Class Rank: 1)

Perry-Lecompton High School, Perry, KS

## SKILLS

### TECHNICAL

**Experienced:** Java, Javascript, Typescript, Python, React, C

**Proficient:** Haskell, OCaml, Scala, GraphQL, postgresQL

Experience in maintaining and developing open source software

### SELECTED COURSE WORK

Distributed Systems, Scalable & Cloud Computing,

Big Data Analytics, System Architecture, Operating Systems,

Networks & Security, Randomized Algos. Art, Design & Digital

Culture, Film Photography, Film Making

## AWARDS

2019

### CIS Senior Design – First Runner Up

University of Pennsylvania

2019

### Magna Cum Laude

University of Pennsylvania

2019

### Dean's List

University of Pennsylvania

2018

### IEE Eta Kappa Nu Member

University of Pennsylvania

2018

### Dean's List

University of Pennsylvania

2017

### Dean's List

University of Pennsylvania

2015

### Governor's Scholar Award

State of Kansas, Office of the Governor

## CONTACT

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