## SHIVAM BAJPAYI

#### **EDUCATION**

#### **PURDUE UNIVERSITY**

BS in Computer Science BS in Applied Mathematics Minor in Philosophy GPA: 3.74

#### **经 SKILLS**

#### Languages & Frameworks

Advanced (30,000+ lines):

Python, Java, C++

Intermediate (10,000+ lines):

Go, Dart, Solidity, C, bash

Beginner (5,000+ lines):

OCaml, R, JavaScript

#### Frameworks:

Hyperledger Fabric, Ethereum (Scaffold-eth, Foundry), Flutter, Angular 7, Spring Boot, AWS, Docker, Kubernetes, LaTeX, SciPy, NumPy, scikit-learn, pandas, \*nix

#### **Relevant Coursework**

**Advanced Algorithms Analysis** 

Cryptography

Zero Knowledge Proofs (Grad)

**Multi-Party Computation (Grad)** 

**Programming Languages (Grad)** 

Compilers

**Operating Systems** 

**Artificial Intelligence** 

**Data Mining and Machine Learning** 

**Systems Programming** 

**Computer Architecture** 

## **VINTERESTS**

Applied Cryptography, Triathlons, Reading, Chess, Traveling, Spicy Sustenance

Club Involvements: BlackRock Green Team Network, BlackRock Analyst Working Committee, Boiler Gold Rush (BGR), Phi Delta Theta Fraternity, Purdue Triathlon Club, Purdue Hackers, Purdue Philosophy Club

## **♣** PROFESSIONAL EXPERIENCE

#### Blackrock | Blockchain Engineer

Manhattan, New York • September '20

- \*\* As the second engineer at Digital Assets Lab, I am responsible for BlackRock's integration with Coinbase. This integration allows for BTC and other cryptocurrencies to be traded in Aladdin. I co-designed the architecture for the project, led meetings with staff Coinbase engineers, and leveraged 80+ people across the asset management workflow to engineer the messaging, networking, and infrastructure needs for this project.
- \*\* Worked on BlackRock's flagship calculator library that resolves returns and attribution for all portfolios at BlackRock. I improved our backend caching logic by 40% to allow for 2 petabytes of numerical data to processed through our servers each week.
- \*\* Enhanced our in-house NLP learning and model-tuning processes to improve additions to our existing training corpus. This allowed us to reduce our existing training corpus by 50% and decreased the number of new additions to our corpus from 17K to ~700.

#### Blackrock | Summer Analyst Intern

Manhattan, New York • May '19 - August '19

- \*\* Developed a dashboard to present integration test metrics & cucumber reports for all BlackRock team builds on a custom Jenkins instance
- \*\* Created webhooks and the entire server side implementation using Spring Boot and a custom Cassandra database layer

#### Purdue University | Undergraduate Research Assistant

West Lafayette, Indiana • April '18 - May '20

- \*\* Researched towards confidentiality, access control, and integrity of data in Hyperledger-fabric applications. This also involved working on new solutions to ensure the privacy and security of the transactions within the Fabric platform.
- \*\* Developed solutions for a confidential supply chain project in the automobile industry using blockchain platform and their applications.

## **PUBLICATIONS**

- \* "Reducing Automotive Counterfeiting using Blockchain: Benefits and Challenges", IEEE DAPPCON 2019
- \* Shivam Bajpayi Et Al. "Exploring Confidentiality Issues in Hyperledger Fabric Business Applications" (August 2, 2018). The Summer Undergraduate Research Fellowship (SURF) Symposium. Paper 11.

## **P** AWARDS

#### BGR MVP Supervisor

For excellence in supervising & handling logistics to welcome over 7500 students during Boiler Gold Rush.

### Deans List & Semester Honors

For consistently having a Cumulative and Semester GPA over 3.5

# AWS prize @ WildHacks '17

For InstaGuard: A security platform that recognizes & notifies acts of violence and aggression from any security camera/feed over the cloud in real time.

For projects and side hacks, please view my Github.