# **Ashni Shah**

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# **Summary**

Recent graduate with experience in software engineering and agile development. Strong knowledge of Python, JavaScript, SQL and excellent ability to understand and explain technical concepts to developers and stakeholders. Have OPT work authorization to work in the United States for up to 36 months without sponsorship and British/Kenyan dual nationality.

### Education

#### **Boston University**

September 2016 - May 2020

B.A. in Computer Science, Minor in Business Administration & Management

**Relevant coursework:** Software Engineering, Database Systems, Applied Cryptography, Cryptography, Network Security, Machine Learning, Privacy & Internet Law, Business, Society & Ethics

## Experience

Directed Research Study, Boston University, Boston, MA

January - May 2020

Undergraduate Researcher

• Designed a secure multi-party computation (MPC) algorithm for a privacy-preserving machine learning model, to predict public opinion election polling results using web browsing histories, while protecting the parties' inputs.

Software & Application Innovation Lab (SAIL), Boston, MA

May 2019 - May 2020

Research, software engineering, and consulting lab bridging the gap between research and industry. Software Engineer Intern

- Sped up asymmetric operations for computing over encrypted data by implementing asynchronous sharing extension in secure multi-party computation (MPC) framework, JIFF.
- Optimized secure shuffling algorithm to reduce asymptotic time complexity and maintain pattern privacy.
- Co-engineered front-end mobile application, Game-Plan, with Angular and Ionic to help people with Intellectual and Developmental Disabilities (IDD) plan and navigate their day-to-day lives.
- Proposed and reworked UI features to create a consistent, familiar and efficient interface for research participants to use the mobile application with ease.

Fire Tech Camp, London, UK

July - August 2018

UK's leading provider of tech camps and courses for 9-17 year olds.

Python Tutor

• Led "Teen Coding with Python" course with challenge-based learning and examples tailored to students' interests to empower them to use technology to approach and solve problems. Awarded Star Tutor of the Week.

#### **Skills**

Languages: Python, Java, JavaScript, TypeScript, HTML, CSS, SQL, Go, C, C++

Frameworks: Angular, Ionic, Node.js, Express, Flask

Other: Amazon Web Services (AWS)

# Leadership

Director of Operations – Business & Technology Club (BizTech) September 2018 - December 2019

- Organized "Tech for Society" conference for 150 students to give participants insight into the future of technology. Specifically, managed logistical and operational functions and planned "Cybersecurity and Privacy" panel.
- Led Python workshops geared towards a non-technical audience to help students improve their technical skills, gain technical project experience and demonstrate how Python can be used in business environments.

#### **Interests**

Tennis, Hiked Mount Kilimanjaro, Mount Kenya and Acatenango Volcano Currently reading: Becoming by Michelle Obama