

# Steven Shan

136 Southgate Road, New Providence, NJ

908-642-2340 • slshan@andrew.cmu.edu • Github (stevenshan)

## Education

### Carnegie Mellon University

May 2021

Bachelor of Science in Computer Science • Minors: Computer Systems, Philosophy

GPA: 3.9/4.0

In Progress	Computer Graphics	Parallel Computer Architecture	
	Database Systems	Methods of Optimization	Algorithm Design and Analysis
	Operating Systems	Probability and Computing	Machine Learning for Text Mining
	Distributed Systems	Web Application Development	Introduction to Computer Systems
	Compiler Design	Parallel Sequential Data Structures and Algorithms	Introduction to Machine Learning

## Experience

### Amazon

New York City, NY

#### Software Development Engineer Intern

May 2020 - September 2020

- Implemented search functionality for advertising partners using Elasticsearch and AWS technologies (DynamoDB, SQS, and SNS)
- Led design reviews with senior developers to create an extensible application-level database abstraction and contributed to threat modeling and security reviews

### Amazon

Seattle, WA

#### Software Development Engineer Intern

May 2019 - August 2019

- Built serverless distributed log analytics web service deployed on AWS that processes more than 500,000 log records per day
- Optimized data ingestion for fault tolerance and latency using database transactions and concurrent programming in Java
- Designed service to enable international expansion by supporting multiple timezones, filtering data by geolocation, and deploying server resources to reduce multi-region network latency

### Carnegie Mellon University

Pittsburgh, PA

#### Teaching Assistant for Web Application Development

August 2019 - Current

- Spearheaded development of new auto-grading platform to assess student submissions and enable expansion of class enrollment
- Leading office hours to help students with topics such as web design, cloud deployment, containerization, and databases
- Collaborating with 9 member course staff to design homework and manage grading

## Funding Metrics

Exchange Place, NJ

#### Software Development Intern

February 2017 - August 2018

- Designed a system that automatically parses consumer credit reports and identifies key elements, resulting in \$30,000/year saving in data cost and 5,000 man-hour/year saving from manual processing
- Launched a fraud-detection tool to validate applicants' credentials, and eliminated related manual process, resulting in 2,000 man-hour/year saving

## Awards

### Microsoft Azure Award

Hack the North, University of Waterloo, 2018

Created a hologram for the Hololens AR headset to automatically translate and take notes on conversations in real-time using C# code, socket programming for streaming audio, and server hosting and cognitive services from Azure

### 1st Place

HackUC Hackathon, 2017

Developed a browser plugin to analyze online news articles' credibility and political leaning to give users more awareness and context

## Skills

**Programming Languages:** Python, C++, C, Go, Typescript, Java

**Software Engineering:** AWS, React, Docker, Bash, Git