U.S. Citizen junchen46@gmail.com (678) 549-9156

# Jun Chen

https://junchen.me GitHub: jchen706 linkedin.com/in/jc787

### **Education**

Georgia Institute of Technology | Atlanta, GA

*August 2021 – December 2022* 

M.S. in Computer Science, GPA 3.90

Georgia Institute of Technology | Atlanta, GA

August 2017 - May 2021

Bachelor of Science in Computer Science, GPA 3.82

Awards: President Undergraduate Research Award Spring 2021, Best Use of Authorize. Net (HackGSU 2019)

# **Experience**

Cloudera *May 2021 – August 2021* 

Software Engineer Intern

Santa Clara, CA

- Created Parsers for gigabyte Spark Driver Logs and Event Logs for inputs into the Spark Simulator
- Built an Apache Spark Simulator for dynamically autoscaling executors based on parsed logs to minimize the cloud provisioning start up time and over allocation of executors
- Saved compute time and cost for heuristic tests, 50-minute Spark application on Kubernetes simulated in 1 minute

# Georgia Institute of Technology (High Performance Architecture Lab)

January 2021 - May 2021

Research Assistant

Atlanta, GA

- 2nd Place CPS-IOT Week 2nd Student Design Competition on Network Computing on the Edge
- Implemented a distributed OpenDroneMap with gRPC and ran drone image dataset tests for communication and computation times on virtual machines with Wi-Fi and mmWave speeds
- Scaled compute time from 3261 seconds to 1026 seconds with additional virtual machines and communication time from 735 seconds to 26 seconds with conversion from Wi-Fi to mmWave speeds.
- Workshop: http://prism.sejong.ac.kr/dossa-4/dossa\_paper/DynaaDCP\_Final.pdf

#### Federal Reserve Bank of Atlanta

*May 2019 – August 2019* 

Software Engineer Intern

Atlanta, GA

- Implemented three chatbots with Microsoft Bot Framework and Webchat with React, ASP .NET, Microsoft OnA Maker, Microsoft LUIS to assist with various bank accessibility services
- Developed bank examination search with Azure Search, converted searching from paper documents to digital search
- Developed an audio conversion and speech-to-text transcription with sentiment analysis, key phrases, entities extraction which speeds up meeting transcription from hours delay to real time

## Georgia Institute of Technology (Digital Design Laboratory)

*May 2019 – August 2020* 

Undergraduate Teaching Assistant (Lead Teaching Assistant: 1/2020 – 8/2020)

Atlanta, GA

- Assist and check off 25+ students weekly on their laboratory assignments
- Help students debug their combinational logic circuits, sequential circuit elements, and programmable logic arrays in Altera Quartus, Protoboards, Logic Analyzers, and Oscilloscopes

#### **Projects**

# Cuda Runtime System for x86 | CUDA, C++, LLVM

- Implemented CUDA Runtime API for the x86 architecture which includes device, stream, event, and memory management modules and ran benchmarks tests
- Used LLVM to manipulate generated NVVM IR from Clang
- arXiv link: https://arxiv.org/abs/2206.07896

Course Critique | React.js, Python, Elasticsearch, Logstash, AWS (critique.gatech.edu)

Created course and professor search used by 20.000+ students to find the grade point average or letter grade percentages of offered courses with AWS Elasticsearch, AWS Lambda, AWS API Gateway, AWS RDS, and React.js

2<sup>nd</sup> Generation Sports | JavaScript, Flask, AWS DynamoDB, Python NLTK

- Created Flask application for research data collection of possible 2<sup>nd</sup> generation athletes for collegiate sports teams
- Developed a web scraper which extracts possible 2<sup>nd</sup> generation athlete from college rosters with Python NLTK

#### **Skills**

**Languages:** Java, Python, C, C++, JavaScript, Node.js

Technologies: AWS, MongoDB, GitHub, Vue.js, React.js, MySQL, Linux, HTML CSS, Elasticsearch, gRPC