Cyrus Jia

1035 Foster City Blvd, Apt D Foster City CA, 94404 (626) 321-8840 cyrusjia@gmail.com

Education

University of Southern California - Viterbi School of Engineering

Los Angeles, CA

Bachelor of Science in Computer Science

Dec 2016

Coursework: Discrete Methods in Computer Science, Data Structures and OO Design, Algorithms/Theory of Computing, Computer Networks, Software Design, Mobile Application Development, Artificial Intelligence, Software Engineering, Operating Systems

Bachelor of Science in Electrical Engineering

May 2016

Coursework: Wireless Communication Technology, Electro-Magnetics, Electronic Circuits, Linear Circuits, Communication Systems

Languages: Java, C++, C, Obj-C, Python, Node, SQL/Cassandra, Matlab, HTML/PHP

Tools: Eclipse, Xcode, Linux, Git, Bitbucket, SourceTree, GCC/G++, ElasticSearch, GDB, REST API, Autodesk Maya

Professional Experience

IBM Bay Area Laboratory

Silicon Valley, CA

Watson Software Engineer

April 2017-Present

- Designed and developed Proof of Concept for client's product integration using Node, C, and Cassandra into Watson Workspace giving client exposure to IBM's B2B customers
- Created Node chatbots using Watson Conversation through a Node express server, Webhooks, and GraphQL calls
- Designed and developed Proof of Concept for Live Video meeting speech to text transcription with a partner company

IBM T.J. Watson Research Center

Yorktown Heights, NY

Software Engineering and Research Intern

May 2016-July 2016

- Created an ended to end project of generating census metrics of any location in the US (e.g. Given that Starbucks across the street, how much does the average visitor make, what are their ethnicity/gender/age distribution)
- Transformed and analyzed geographical and census datasets and inserted into an ElasticSearch Database
- Designed a 3D Gaussian integration library in python, setup geo-polygon queries in ElasticSearch, wrote a Geo-Hash Algorithm

Intelligent Systems Technology, Inc.

Los Angeles, CA

Software Engineering Consultant

March 2016-May 2016

- Designed and wrote algorithms to decouple the Product Planning design process to lower costs and times
- Implemented and designed multi domain matrix algorithms/analyses, working closely with a research scientist
- Algorithms: Triangularization and Sequencing algorithm, Cycle detection, Strongly Connected Component finder, distance between nodes, propagation tree, reachability algorithm, and change propagation algorithm

Project Experience

Arbitrage Trade Bot - Fintech (Python)

Winter 2017

- Used triangular arbitrage to detect trading opportunities on Binance, a top cryptocurrency exchange
- · Bid/Ask Orderbook analysis to find threeway currency price discrepancies and output maximum trade profit

Deep Reinforcement Learning for Cadaveric Hands(Python)

Fall 2016

- Fitted cadaveric hand muscle tension data into a machine learning neural network written in TensorFlow to predict force output
- Contributed to RandOpt, python library for optimizing Neural Network hyper-parameters

Blabble(Obj-C/iOS)

Spring 2016

- iOS anonymous chatroom app based on Firebase backend
- Designed on MVC architecture and utilizes CoreLocation to display chatrooms around user location

ChessPong (Java)

Fall 2015

• Integrated a modified version of networked pong using multithreading code as well as other game options, all running simultaneously to Chess and collaborated via Bitbucket

Twitter Engine (C++)

Summer 2015

- 5,000 lines of code, QT-based Twitter program with login functionality, following/followers list, tweets, and mentions
- Features: Hash function for password database, merge sort for sorting tweets, Tarjan's algorithm for finding strongly connected nodes (users), heap tree for tweet popularity sorting, and database search

Misc

Computer Science at Princeton: Bitcoin and Cryptocurrency Technologies (Ongoing)

Interests: Stock/Option trading, Cryptocurrencies (Blockchain/DAG), Ethereum Smart Contracts, Solidity