

## Victor Xue

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### EDUCATION

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#### Georgia Institute of Technology

Expected Graduation: December 2022

*Master of Science, Computer Science (OMSCS)*

GPA: 4.00

Relevant Coursework: AI for Robotics, Intro to Operating Systems, High Performance Computing

#### University of California - Los Angeles

June 2019

*Bachelor of Science, Chemical Engineering*

GPA: 3.79

Professional Affiliations: Tau Beta Pi Treasurer and Corporate Relations Officer

### WORK EXPERIENCE

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#### Software Engineer

September 2019 -- Present

*Northrop Grumman Missions Systems*

- Developed a real-time notification service that searches for patterns in images (Flask, Kafka).
- Added a web GUI to the notification service, allowing users to add new search patterns and to see pattern-matched images in real-time (Vue.js, socket.io).
- Implemented an ML model for network traffic classification based on a company whitepaper.
- Created a demo of the ML model using Elasticsearch and Grafana for data visualization.
- Containerized the services used in the network traffic classification with Docker and deployed the containers onto a Kubernetes cluster.
- Wrote and tested low-level requirements for the instrument display and core libraries on the safety-critical UH-60V helicopter program.
- Conducted structural coverage analysis and model verification on the flight director, instrument display, and core library modules for DO-178C software compliance.

#### Undergraduate Research Assistant

June 2018 -- June 2019

*ZarLab (Computer Science Department), UCLA*

- Assessed the virtual memory consumption, runtime, and relative alignment accuracies of 32 sequence alignment tools.
- Generated artificial data to analyze 32 sequence alignment tools for their minimum read length and multimapped and unmapped-read behavior.

### PROJECTS – victorxue.netlify.com

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#### Connect Four AI

- Implemented the game logic, menu, controls, and graphics using the SDL library in C++.
- Built a difficulty-adjustable AI using a minimax algorithm.

#### Blog API

- Created a RESTful blog API with password authentication using Express and MongoDB.
- Included a rich-text editor for writing posts and comments.
- Connected the backend to React and deployed the app to Heroku.

### TECHNICAL SKILLS

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Programming Languages: Python, Javascript, C, C++, HTML, CSS, Matlab

Tools: Docker, Kubernetes, Kafka, Elasticsearch, React, Vue.js, Express, Flask, Emscripten, gRPC, Protobuf, CUDA, Pandas, Scikit-learn, Git, DOORS