Victor Xue

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EDUCATION

Georgia Institute of Technology   Expected Graduation: August 2023

Master of Science, Computer Science (OMSCS)

GPA: 4.00

Relevant Coursework*:* Artificial Intelligence for Robotics, Graduate Intro to Operating Systems

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

Relevant Coursework**:** Intro to Computer Organization, Algorithms, Algorithms in Bioinformatics

WORK EXPERIENCE

Software Engineer   September 2019 – Present

Northrop Grumman Missions Systems, Woodland Hills

- Removed country-specific code functionality from the H-1 mission computer.
- Wrote and tested low-level requirements for the instrument display (EFIS) and the 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.
- Created a VBS-Batch hybrid script to minimize the number of concurrent licenses in use.
- Worked cross-functionally with other software and system engineers to validate testing.

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, when run on large datasets sourced from NCBI and 1KGP.
- Generated artificial data to analyze 32 sequence alignment tools for their minimum read length and multimapped-and-unmapped-read behavior.
- Surveyed the indexing, seed length, and alignment algorithms of 107 sequence alignment tools.

PROJECTS – victorxue.netlify.com

Connect Four AI

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

Pokemon Memory Card

- Developed a memory card game and view gallery using the Pokemon TCG API and React.
- Players can switch between three modes (normal difficulty, hard difficulty, view gallery).
- Includes search functionality that allows players to choose the Pokemon cards to be displayed.

Blog API

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

TECHNICAL SKILLS

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

Frameworks: React, Express, Mongoose, Gatsby

Tools: Node.js, MongoDB, Redis, Emscripten, Git, ClearCase, SCADE, DOORS, Docker, Windows, Linux