

WILLIAM NGUYEN

(714) 406-8131

williamngoc93@hotmail.com • [linkedin.com/in/william-nguyen-934552194](https://www.linkedin.com/in/william-nguyen-934552194) • [captnw.github.io](https://github.com/captnw)

EDUCATION

University of California, Irvine

Sept 2018 - June 2022

Bachelor of science in Computer Science

Bachelor of science in Computer Game Science

GPA: 3.84

TECHNICAL SKILLS

Languages	HTML, CSS, JavaScript, Typescript, Python, Java, C#, C, C++, SQL
Frameworks	Node.js, React.js, React native, Jasmine.js, Spring boot
Tools	Git, Visual Studio Code, Visual Studio, Unity
Systems	Windows (10,7), Linux (Ubuntu)

PROJECTS

Fabflix

May 2022

Mock movie storefront where users can search and purchase digital copies of movies.

Libraries/tools used: Java, SQL, JavaScript, ReactJS, React native, Stripe, Spring boot

- Set up and developed the Fabflix back end via the process of Test Driven Development.
- Performs 2-5 queries in the backend per search to populate movie information in the frontend.
- Utilized the Stripe credit card vendor API to imitate payment functionality.

Object recognition project

March 2022

Object detection software that can be trained with images to detect and match objects in other images.

Library/tools used: Python, NumPy, Matplotlib, SciPy, Jupyter Notebook

- Implemented object recognition with image processing, using HOG (histogram of oriented gradients).
- Create a template for the software to match by passing in positive and negative training images.

Checkers AI

December 2020

This AI simulates and backtracks via the use of search trees to play checkers.

Libraries/tools used: C++, CMake

- Utilized Monte Carlo tree search, and backtracking to empower the checkers AI to make good moves.
- Improved AI's effectiveness by increasing its simulations per turn from 80 simulations to 1000 simulations.

DiscordActivityBot

October 2020

Discord Bot to track and notify user of their activities and the server's activity.

Libraries/tools used: Discord.py, Matplotlib, SQLite, APScheduler, pytz, asyncio.io

- Co-developed the bot alongside a fellow student and hosted the bot on AWS for 5-6 months.
- Deployed a Discord bot that scraped fellow server occupants' online activities in a server of 30-40 people.
- Stored hashed data to SQLite database which allowed the bot to retrieve the users' activity later on.