

Nick Withers

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EDUCATION

University of California, Davis - BS Computer Science

September 2019 - December 2022

GPA: 3.956 - Graduated with Honors

SKILLS

- C, C++, Java, JavaScript, Python, HTML/CSS, WebGL, GLSL, Haskell, Prolog, Erlang, MATLAB
- Git, Jira, TestComplete
- Basic computer architecture
- Critical Thinking, Problem Solving, Effective Written/Verbal Communication

EXPERIENCE

Software Test Automation Engineer - Boeing

August 2023 - Present

- Wrote test cases and automated them by creating JavaScript scripts
- Worked with team to develop a test automation framework in TestComplete for web app testing

PROJECTS / COURSEWORK

Computer Graphics - Fall 2022

- Built a simple 3D renderer using WebGL which can load any scenes consisting of one or more obj files
- Implemented Phong shading with multiple light sources and texture mapping using normal maps

Artificial Intelligence - Winter 2022

- Implemented A* path search algorithm to navigate down Mt. Saint Helens
- Developed a Connect 4 program using minimax to play against a computer and classmates
- Built and trained a model which used deep Q-learning to play pong

Web Programming - Spring 2022

- Created a web-based game based on preferences over user inputted TikTok videos using a SQLite database
- Front-end programming using Javascript, HTML, CSS and server-side programming using Node.js and Express
- Built a React app with servers for API calls and dynamic display of CDEC reservoir data using a calendar picker

Computer Vision - Spring 2022

- Implemented functions for filtering and edge detection using MATLAB
- Applied robust homography estimation with Harris corners, SIFT descriptors, and RANSAC for image stitching
- Trained and augmented a deep network using PyTorch to classify the images in the CIFAR10 dataset

Cryptocurrency Discord Bot / Personal Project - Winter 2023

- Developed a Python Discord bot that fetches cryptocurrency data from the Live Coin Watch API, responds to user commands, and updates its status with the current token price, refreshing every 30 seconds

INTERESTS

- Gaming, Blockchain, Generative Art, Golf, Snowboarding, Travel