cjto2000.github.io | 360.890.7771 | cjto2000@gmail.com

EDUCATION

University of Washington (GPA: 3.85)

Seattle, WA

BS Computer Science, Class of 2022

SKILLS

Languages: Python, Java, C++, C, SQL, JavaScript, HTML, CSS

Tools: PyTorch, OpenAI, Docker, Spark, React.js, Django, Selenium WebDriver

EXPERIENCE

Software Engineer Intern | Okta

Jun 2021 - Sep 2021

Developed heuristics to detect malicious IP addresses and high risk authentications

- Deployed a new feature that detects malicious IPs by looking at high unknown username rates
- Modified the risk scoring algorithm to effectively handle events from anonymous proxies

Co-founder | Clarity Core

Jan 2021 - Jun 2021

Launched a solid-form aromatherapy product generating \$2500+ in sales revenue

- Awarded the \$2500 Best Consumer Product Idea at Dempsey Startup Competition
- Interviewed 20+ people and drove sales via cold-calls, pop-ups, and connections

Research Assistant | Neural Systems Lab

Jan 2021 - Jun 2021

Leveraging AI in a bi-directional brain-computer interface (BBCI)

- Simulated a reinforcement learning agent learning a task, incurring damage, and recovering
- Simulated the components of a BBCI with neural networks to instigate recovery

SDE Intern | Amazon Lab126

Jun 2020 - Sep 2020

Designed and implemented data preparation pipeline for speech data

• Sped up the data preparation process by $\sim 15\%$ while also increasing its use cases

Software Engineer | DotMote Labs

Jun 2019 - Mar 2021

Implemented scalable workflows for climate change research

- Published a paper in the remote sensing journal on flower detection via satellite imagery data
- Implemented an object detection pipeline that detects various flower species in a meadow
- Developed a dynamic graph visualization tool to monitor and create workflows

Computer Programming II Teaching Assistant | UW

Sep 2019 - Mar 2020

Led bi-weekly section teaching basic data structures and programming concepts

PROJECTS

Neural Lesioning Interface | Capstone Project

Jun 2021

An interface for lesioning a neural network that predicts neural dynamics for grasping

- Created a matrix that lights up as the model trains in order to visualize the dynamics in real time
- Designed graphs that show average firing rate and principal components to interpret model behavior

World Models Dec 2020

Implemented a neural network with a vision, memory, and controller component to replicate a paper

• Achieved a sufficient reward to navigate the car-racing environment in OpenAI