Justin Ong

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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 rule 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

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 ~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
Lead 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