

□ (+1) 650-842-0406 | Sojoyin@ucsd.edu | \* www.jonathanyin.us | • JonathanYin | • jonathan-yin-

## Education

#### University of California, San Diego

La Jolla, CA

B.S. IN MATHEMATICS AND COMPUTER SCIENCE, MINOR IN COMPUTER ENGINEERING

June 2024

Relevant Coursework: Data Structures, Algorithms, Operating Systems, Software Engineering, Databases, Web Client Languages, Theory of Computation, Deep Reinforcement Learning, Programming Language Paradigms, Honors Linear Algebra, Statistics, Optimization for Data Science

# **Experience**

#### **Center for Applied Internet Data Analysis**

San Diego, CA

FRONTEND DEVELOPER INTERN

Sept. 2023 - Present

- Refactored over 2000+ lines of React code for Meteor.js data monitoring application, enhancing readability and maintainability via SASS/Ant Design
- · Led the migration and integration of legacy testing API into React codebase using Express, enabling storage into MongoDB database collection
- Managed and optimized AWS EC2 instances for simulation application, improving performance by 15%

#### University of California, San Diego Jacobs School of Engineering

San Diego, CA

Undergraduate Researcher June 2023 - Present

- · Worked with Professor Sicun Gao on research projects involving deep reinforcement learning
- Studied reinforcement learning techniques independently, replicating algorithms in OpenAI's Spinning Up project

**Northrop Grumman** San Diego, CA

SOFTWARE ENGINEERING INTERN

June 2023 - Aug. 2023

- · Authored Python scripts to automate over 50 API calls for map software system, enhancing system efficiency and reducing manual overhead
- · Developed and implemented a suite of testing solutions for application GUIs using Robot Framework and Python
- Leveraged Robot Framework's libdoc tool to automate documentation for five application codebases

**Stellantis** Auburn Hills, MI

ICT INTERN

May 2022 - Aug. 2022

- · Engineered a high-fidelity prototype in Unreal Engine 5, replicating existing Unity-based vehicle model viewer features
- Imported and optimized 3D vehicle models from Autodesk Maya into Unreal Engine 5, ensuring seamless integration

**Berkeley Pharma Tech** Berkeley, CA

SOFTWARE DEVELOPMENT INTERN

June 2021 - August 2021

- Built and published an Android app to the Google Play Store using Unity and C# scripts
- Leveraged Azure PlayFab to implement user login system, monitoring app performance and analytics

# **Projects**

#### Cloud Frame Next. Js, Tailwind CSS, TypeScript, Node. Js, Cloudinary

Aug. 2023 - Present

- · Engineered a cloud-based photo gallery using Next.js, supporting high-resolution image storage and retrieval
- · Integrated Cloudinary for real-time image processing, enabling features such as dynamic resizing, filtering, and automatic image categorization

### Reddit Scraper React, Emotion, Framer Motion, Python, Flask, Vite

May 2023 - Aug. 2023

- Developed a dynamic web scraper to display Reddit posts from r/UCSD using React and Emotion
- Integrated Flask as a backend service for server routing and PRAW for communication with Reddit's API

#### **Sustainability Research** Vue, Leaflet, Tailwind CSS, Node. Js, Express

Jan. 2023 - Apr. 2023

- Spearheaded the design and development of an interactive research site, leading a team of five students
- · Leveraged Leaflet and Mapbox APIs to create a custom map interface for locating producers and farms in the San Diego area

# Extracurricular Activities

### **Association for Computing Machinery**

Aug. 2023 - Present

Mentored two students at UCSD through ACM's Bit-Byte program, providing tailored guidance on academic and career development

· Attended and actively participated in chapter meetings and technical workshops, gaining insights into emerging technologies

# Skills

MENTOR

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

**Frameworks** Next.js, React.js, Redux, Node.js, Express, Vue.js, Jest, JUnit, Flask, Robot

Tools Git, Jira, Jenkins, Confluence, MongoDB, Firebase, VS Code, Visual Studio, Vite, Unity, UE5, Postman, Agile