

Jonathan Yin

☎ (+1) 650-842-0406 | ✉ joyin@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

UC San Diego Computer Science and Engineering Department

San Diego, CA

INSTRUCTIONAL ASSISTANT

Mar. 2024 - Present

- Tutored undergraduate students on software engineering practices and concepts, including agile methodologies, design patterns, version control, and testing
- Debugged HTML/CSS/JavaScript code for over 30+ students, receiving a 100% approval rating

Center for Applied Internet Data Analysis

San Diego, CA

FRONTEND DEVELOPER INTERN

Sept. 2023 - Mar. 2024

- 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%
- Developed Android testing application using Android Studio and Kotlin, integrating Termux scripts for various API calls

UC San Diego Computer Science and Engineering Department

San Diego, CA

UNDERGRADUATE RESEARCHER

June 2023 - Dec. 2023

- 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 - Aug. 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

Skills

Languages	JavaScript, TypeScript, Java, Python, C#, C++, C, HTML, CSS, SQL
Frameworks	Next.js, React, Redux, Node.js, Express, Vue, Jest, JUnit, Flask, Robot
Tools	Git, Jira, Jenkins, Confluence, MongoDB, Firebase, VS Code, Visual Studio, Vite, Unity, UE5, Postman, Agile