

Dennis Lustre

✉ dennis.lustre@gmail.com | [in dennis-lustre](#) | [dlustre](#) | [Portfolio](#)

EDUCATION

University of California, Irvine

September 2020 – June 2024

Bachelor of Science in Computer Science, Specialization in Intelligent Systems

Irvine, CA

- GPA: 3.56 (5x Dean's List)
- Selected Coursework: Data Structures, Algorithms, Web Crawling, Project in AI, Machine Learning and Data Mining, Computational Photography and Vision

TECHNICAL SKILLS

Programming Languages: Python, C++, JavaScript, HTML/CSS, Bash

Technologies and Frameworks: React.js, React Native, Firebase, Jest, PyTorch, NumPy, Matplotlib

Developer Tools: Git, VSCode, Eclipse, Linux CLI, Jupyter Notebook, Agile/Scrum, Jira/Kanban

EXPERIENCE

Software Engineer Intern

July 2023 – Present

Thaddeus Resource Center (Non-profit organization)

La Verne, CA

- **Reduced total lines of code by 50% (over 700 lines):** Engineered a unique approach using **React** components to programmatically render and populate 25+ screens
- **Significantly improved codebase organization and maintainability** by migrating static data to a centralized data directory, authoring comprehensive Markdown articles detailing the structure of JSON objects, and achieving **100%** docstring coverage for the app's completed modules
- **Pioneered the introduction of testing practices:** Demonstrated initiative by setting up a **Jest**-based testing environment; authored clear documentation for testing procedures to further foster a culture of quality assurance within the team
- **Served as a mentor for new interns** by facilitating their onboarding with environment setups and the app repository

Computer Science Instructor

July 2022 – Present

Coding Minds Academy

Irvine, CA

- **Promoted to intermediate-level instructor** seven weeks after first assessment by asking management team how I could improve my teaching and consistently implementing their feedback
- **Taught 4 different programming languages to young students** (Python, Java, JavaScript, HTML/CSS)
- **Collaborated with management to improve scheduling website:** Identified a visual issue and provided a solution to management team

PROJECTS

NASA Radiation Microscopy Generative Model | [Python](#), [PyTorch Lightning](#) | [GitHub](#)

June 2023

- **Furthered research on the effects of cosmic radiation on astronauts** by developing a Generative Adversarial Network with **PyTorch Lightning** to generate synthetic images that mimic irradiated cells
- **Classified images with 93% accuracy on a large subset of the domain** by leveraging ResNet101
- **Presented project results to NASA GeneLab scientists** after developing the project in Agile sprints

Aim Trainer Web Game | [JavaScript](#), [React.js](#), [Firebase](#), [HTML](#), [CSS](#) | [GitHub](#)

August 2023

- **Optimized load times resulting in a 66% improvement in First Contentful Paint (FCP) and an 81% improvement in Largest Contentful Paint (LCP)** by module bundling with **Vite**
- **Implemented user authentication and cloud database** with **Firebase** Authentication and Cloud Firestore
- **Automated the build and deployment pipeline for efficient publishing to GitHub Pages** by leveraging GitHub Actions

Tic-Tac-Toe Discord Bot | [JavaScript](#), [Discord.js](#), [HTML](#), [CSS](#) | [GitHub](#)

September 2023

- **Devised and implemented a novel solution for the game interface** by using Puppeteer API for dynamic image rendering in response to user messages
- **Conducted comprehensive code reviews with a partner** to proactively identify bugs, resulting in enhanced code quality and software reliability
- **Implemented continuous integration and deployment** using Git version control