# Dennis Lustre

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# **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)
- Leadership & Involvement: Software Sub-Team Lead for FUSION Engineering Project 23-24 | ICS Student Council Projects Committee

## Technical Skills

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

Technologies & Frameworks: React.js, React Native, Next.js, Node.js, Firebase, Docker, Postman, MySQL, PyTorch Other: GitHub/GitLab, Agile (Scrum), Jira (Kanban), VSCode, Eclipse, Linux CLI, Jupyter, DigitalOcean

#### EXPERIENCE

# Software Engineer Intern

July 2023 – Present

Thaddeus Resource Center

La Verne, CA

- Led a website overhaul that reduced operational costs by 78%, optimized site performance using static generation, and secured more valuable internships for the organization. Pitched the project for CEO approval, transitioned from Webflow to Next.js, led a team of 6 using Agile methodology, and used Docker to deploy on DigitalOcean
- Reduced total lines of code by 50% (over 700 lines) by engineering a unique approach for a React Native app, using React components to dynamically 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: Took initiative by implementing a Jest-based testing environment and authoring clear documentation for testing procedures to foster a culture of quality assurance within the team
- Mentored new interns, accelerating their onboarding process with hands-on setup assistance, comprehensive repository walkthroughs, and navigating culture and organizations

# Computer Science Instructor

July 2022 - Present

Coding Minds Academy

Irvine, CA

- Promoted to intermediate-level instructor in record time (7 weeks after first assessment) because of positive client feedback and by consistently soliciting and implementing management input on teaching strategy
- 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