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**: 3.58 (6x 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), CI/CD (GitHub Actions), 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** and **Firebase**, led a team of 6 using **Agile** and **CI/CD** methodologies, and deployed as a **Docker** container to 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