DANNIEL KIM

linkedin.com/in/danniel-kim/ | dannielk.vercel.app/
(714) 248-3990 | dannielkim.cs@gmail.com | Fullerton, CA

EDUCATION

University of California, Riverside | *B.S. in Computer Engineering* *Riverside, CA* | **SEPT 2021 - DEC 2024**

- Cumulative **GPA**: 3.9/4.0 | Chancellor's Honors List, Anticipated Summa Cum Laude

Relevant Courses: C++ OOP & DSA, Software Construction & Design, Algorithm Engineering, Embedded Systems, Operating Systems, Computer Architecture & Design, Logic Design, Software Analysis Testing & Verification, Automata and Formal Languages

EXPERIENCE

Full-Stack Developer | *ACM@UCR* *Riverside, CA* | **JAN 2024 - PRESENT**

- Collaborating with a **cross-functional** team of 30+ to develop a hackathon template supporting over 1,000 users across UCR Hackathons, including individualized dashboards for key stakeholders with **Next.js**, **TailwindCSS**, and **Firebase**
- Refactored codebase from **JavaScript** to **TypeScript**, improving code readability and reducing debugging time by 30%
- Implemented **ESLint** to improve code quality by 40%, enforcing coding standards and consistency, with a focus on **DX**
- Increased test coverage by 20% and reduced post-deployment bugs with **automated unit tests** and **E2E tests** with **Cypress**

IT Specialist & Computer Technician | *Kaddy's Computer Repair and IT Service* *La Habra, CA* | **MAY 2020 - JULY 2020**

- Diagnosed and resolved 200+ cybersecurity threats, including malware, ransomware, and rootkits
- Utilized forensic analysis and recovery tools to identify and retrieve 500GB+ lost data compromised by various issues
- Audited inventory data on components and software to ensure accurate records and timely restocking
- Developed and implemented **Bash** scripts to streamline software maintenance and operating systems by 2x
- Utilized **Trello** to foster collaboration and streamline workflows in a supportive and cooperative work environment

Volunteer Leader | *STEMup4Youth* *Fullerton, CA* | **SEPT 2017 - MAY 2020**

- Facilitated 30+ hands-on learning experiences for underprivileged youth, while demonstrating and explaining science concepts
- Successfully guided and assisted 5 volunteers, fostering a collaborative environment to enhance the overall learning experience
- Contributed to the development of educational materials, ensuring the sustainability and scalability of STEMup4Youth's initiatives

PROJECTS

CargoFlow: Efficient Ship Cargo Management System | *Collaborative Project* **SEPT 2024 - DEC 2024**

- Developed a web app using **Next.js**, **Typescript**, **TailwindCSS**, and hosted on **Vercel**, in a **agile/scrum** environment with **Trello**
- Engineered and iteratively refined **A*** and **Greedy Best First Search** algorithms, balancing multiple **heuristics** to improve cargo rebalancing and loading/unloading workflows, reducing operation time by 30% and computational overhead by 25%
- Integrated **IndexedDB** for real-time storage of manifests, instructions, and logs, ensuring data persistence and seamless recovery

Mock Anti-Drone Missile Defense System | *Collaborative Project* **SEPT 2024 - DEC 2024**

- Engineered a target tracking **Real-Time System** in a team of 5 using **agile/scrum** and **Trello**, integrating **Python**, **C++**, and **CAD**
- Utilized **OpenCV** and Ultralytics **YOLO** to train, quantize, and optimize **ML** models for precise detection and tracking of tennis balls
- Designed a servo-powered gimbal system controlled by **Arduino**, integrating webcam-based positional data and applying kinematic principles to align the projectile subsystem with moving targets

J&M Products Website | *Collaborative Project* **JUNE 2024 - SEPT 2024**

- Developed a client-specific website in a team of 10 using **agile/scrum** and **Jira** leveraging **Next.js**, **TailwindCSS**, and **Node.js**
- Worked in **cross-functional** teams with **UI/UX** designers to translate **Figma** designs into dynamic modular components, enhancing code maintainability and reducing front-end development time by 25%
- Implemented **SEO** best practices and optimized page load times, resulting in a 15% increase in client engagement and traffic

Sentiment-Based Chatbot | *Personal Project* **SEPT 2023 - DEC 2023**

- Designed a **C++** sentiment-based chatbot utilizing adaptive learning to extract numerical values representing message bias
- Employed **MySQL** to establish a database containing keywords paired with bias values, along with associated response phrases
- Streamlined builds with **CMake** and ensured system reliability through **Google Test** reducing debugging time by 30%

TECHNICAL SKILLS

Programming Languages: Python, C++, TypeScript, JavaScript, Bash
Developer Tools: Git, Jira, Trello, ESLint, Cypress, Pytest, CMake, Google Test, Github Actions, NoSQL, SQL
Web Development: Next.js, React.js, Node.js, TailwindCSS, Bootstrap, Framer Motion, IndexedDB, Firebase, Figma, HTML, CSS
Technologies: OpenCV, Ultralytics YOLO, Arduino, REST API, Docker, CAD