

DINA KHATRI

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OBJECTIVE

Results-driven Electrical and Software Engineer with hands-on experience in hardware testing, embedded systems, and software development. Skilled in optimizing testing workflows, improving deployment efficiency, and ensuring system reliability. Seeking to apply technical expertise to develop and validate innovative, high-performance engineering solutions.

EDUCATION

San Jose State University - M.S. in Electrical Engineering **August 2025 - Present**

Relevant Courses: Embedded Software

UC Berkeley - B.S. in Electrical Engineering and Computer Science **August 2022 - August 2024**

Relevant Courses: Designing Information Devices and System I & II, Structure and Interpretation of Computer Programs using Python, Data Structure and Algorithm using Java, Computer Architecture, Efficient Algorithms and Intractable Programs and Introduction to Artificial Intelligence, Computer Security and Cryptography

WORK EXPERIENCE

STRYKER- R&D Test Engineer Intern **July 2025 - Present**

- Conduct HDMI compliance and flicker testing to ensure device performance meets industry standards.
- Programmed a robotic arm to automate testing sequences and reduce manual intervention.
- Designed and implemented circuit enhancements on a protoboard to improve functionality and reliability of test fixtures.
- Managed source code and testing workflows through GitLab to improve collaboration and traceability.
- Automated test cycles to improve efficiency and consistency of validation processes.

CALTRANS- Student Assistant **June 2023 - December 2023**

- Updated internal systems with project data using Java and Eclipse, which ensured precise tracking and reporting, thereby improving data reliability.
- Collaborated with teams using agile methodologies to maintain and support project updates, enhancing system performance and team coordination, and ensuring alignment with technical requirements.

STRYKER- Software Test Engineer Intern **June 2022 - August 2022**

- Programmed the unit with the latest software using version control systems (GIT) and integrated development environments such as Quartus Prime Programmer and Eclipse, enhancing software deployment efficiency.
- Reported and tracked bugs in JIRA in an agile environment to ensure swift resolutions, optimizing product development cycles.

PROJECTS

Secure File Sharing System | Go, Cryptography & Encryption, Secure System Designs

- Designed and implemented a secure system for storing and sharing files over an untrusted Datastore, defending against active adversaries.
- Built user authentication, encrypted file storage, secure file sharing via invitations, access revocation, and data integrity verification across multiple user devices.

Voice-Controlled Car | Arduino, PCA/SVD, Signal Processing

- Developed a voice-controlled car that classifies four spoken commands using PCA-based waveform analysis.
- Implemented signal preprocessing and real-time classification on Arduino to accurately respond to different voice inputs in noisy environments..

SKILLS

- **Programming Languages:** Python, JAVA, C++, C, GO, SQL, Ruby/Rails, Swift
- **Hardware & Testing:** Oscilloscope, Circuit Design, Prototyping on Protoboard, HDMI Compliance Testing, Flicker Testing, Test Fixture Development, FANUC Robotic Arm Programming
- **Embedded Systems:** Arduino, FreeRTOS, PCB Design, Microcontrollers
- **Web Development:** RESTful APIs, HTML, CSS, JavaScript, Firebase
- **Tools:** Git, JIRA, Eclipse, Bit Bucket, Quartus Prime, PCB Design
- **Testing:** Unit Testing, Bug Tracking, Agile Methodologies

LEADERSHIP EXPERIENCE

Microsoft Student Ambassador	October 2021 - December 2023
BeelikeCoders 2022 & 2023 Hackathon -Lead Organizer	March 2022, April 2023

CERTIFICATES

UI/UX Design from Google	Issued on September 2021
AWS Cloud Practitioner	Issued on October 2024

AWARDS

Academic Honor Student	December 2019 - August 2024
Dean's List 4.0 GPA	March 2021