Eyan Documet

eyan.documet@pm.me | (310) 480-5366 | /in/eyandocumet | eyandocumet.xyz

Mechanical Engineer with expertise in additive manufacturing, mechatronics, thermodynamics, materials, and design; seeking an internship for Summer 2025.

EDUCATION

- **University of California, Berkeley** – BS in Mechanical Engineering | 3.31 GPA — December 2025
- **College of the Canyons** – AS-T in Mathematics | 3.88 GPA — June 2023
- **College of the Canyons** – AS-T in Physics | 3.88 GPA — June 2023

EXPERIENCE

Rear Suspension Engineer, UC Berkeley Solar Vehicle Team – Berkeley, CA — Feb 2022 – Present

- Led the transition from conventional design techniques to automated topology optimization, as well as a transition from aluminum to carbon fiber for structural components, halving part-count and reducing weight.
- Participated in design reviews with team leads and project managers, providing technical input that refined designs and ensured alignment with project objectives and timelines.
- Collaborated with a team of student-engineers to integrate multidisciplinary solutions, enhancing project outcomes and promoting knowledge sharing across teams.

Vice President, College of the Canyons Chemistry Club – Valencia, CA — February 2023 - June 2023

- Collaborated with faculty to co-develop and execute experimental designs, ensuring safety and educational value for 100+ participants in live demonstrations.
- Led discussions on experimental results, effectively communicating complex chemical concepts to 20+ club members and fostering deeper understanding.
- Managed procurement of chemicals, equipment, and safety materials for performing demonstrations in novel environments.

MESA Tutor, College of the Canyons – Valencia, CA — April 2022 – May 2023

- Delivered targeted instruction across multiple STEM subjects, enhancing comprehension for over 50 students per semester.
- Led biweekly review sessions in concert with course faculty, boosting student exam scores by 15% through focused concept reinforcement.
- Developed personalized study plans and guided students through problem sets, cultivating advanced problem-solving skills and intuition.

PROJECTS

- **"πRo-BOT" Autonomous Fire Suppression System** – 2.5-DoF robotic platform for autonomous fire detection, prevention, and suppression in hazardous and remote environments. Prioritized portability and modularity. Efficient finite-state machine written with event-driven programming.
- **"Study Buddy" Smart Lamp** – Smart RGB-LED desk lamp employing IoT principles to automate study routines, integrating Pomodoro cycles, adaptive light temperature, and prioritized productivity alerts.
- **"Safety Grenade" Wearable Security Device** – Pin-activated, wearable/throwable alarm system for emergency signaling in hostile or unsafe scenarios.

SKILLS

- **CAD & Simulation:** SolidWorks, Fusion 360, Simulink, Blender
- **Prototyping & Manufacturing:** 3D Printing, CNC, Circuit Design, Soldering, Arduino, ESP32
- **Analysis:** FEA/FEM, Control Systems, Dynamics, Thermodynamics
- **Programming:** Python, MATLAB, C/C++, Java, LaTeX