

Eyan Documet

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OBJECTIVE

BSME graduate oriented towards applied research and early-stage product development, with hands-on experience in validation, design, prototyping, and hardware integration; seeking a full-time mechanical engineering role in design, testing, or research and development.

EDUCATION

University of California, Berkeley , B.S. in Mechanical Engineering - 3.47 GPA	Dec 2025
College of the Canyons , A.S. in Physics and Mathematics - 3.88 GPA	May 2023

EXPERIENCE

Engineering Intern , Lawrence Berkeley National Laboratory - Berkeley, CA	Jun 2025 - Present
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- Led R&D efforts for a light and low-cost accelerator prototype, managing timelines, thorough project documentation, and testing.
- Refurbished unique experimental setup required for advanced materials characterization, allowing for component selection and integration.
- Developed new software tools for devising permanent magnet schemes to correct out measured harmonic errors.

MESA Tutor , College of the Canyons - Valencia, CA	Apr 2022 - Jun 2023
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- Delivered individualized, small group instruction for lower-division physics and mathematics courses, improving course competency for over 50 students per semester.

PROJECTS

Inchworm Robot	Aug 2025 – Dec 2025
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- Designed and simulated motion planning for an inchworm-inspired 2-link robotic climber.
- Developed finite-state architecture, circuit design, and comprehensive Bill of Materials.

Gyroid Optimization Experiment	Aug 2025 – Dec 2025
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- Designed and executed a full-factorial mechanical testing study on 3D-printed gyroid structures, varying geometric isovalue and cell density to quantify energy absorption.
- Scripted data-analysis workflows to process strain-load CSVs, compute energy metrics, and perform statistical modeling to identify geometry-dependent performance trends.

Robotic Fire Suppression System	Feb 2025 – Jun 2025
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- Designed 3D-printable components to create the kinematic chain for a 2.5 DoF robotic arm, integrating an off-the-shelf electronic water gun mechanism into custom-built robotic components.
- Developed low-level computer vision and motion algorithm for heat-source sensing and localization, enabling deployment on lightweight edge hardware.

UC Berkeley Solar Vehicle Team (Rear Suspension)	Feb 2025 - Jun 2025
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- Contributed to the suspension design for the Gen XI CalSol race car, performing numerical analysis, topology optimization and DFMA efforts, halving part count and reducing weight.

LEADERSHIP AND VOLUNTEERING

Reader, ME154: Thermophysics for Applications , UC Berkeley - Berkeley, CA	Aug 2025 - Dec 2025
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Volunteer Camp Counselor , Santa Monica Family YMCA - Santa Monica, CA	July 2015 - Present
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SKILLS

Engineering Software: Creo Parametric, Autodesk Fusion, ANSYS, Windchill PLM

Programming Languages: Python, MATLAB and Simulink, C/C++ (Arduino), LabVIEW, LaTeX

Mechanical Design: GD&T, DFMA, FEA, Reverse Engineering, Advanced Manufacturing

Tools and Platforms: Git, Raspberry Pi, 3D Printing (FDM, SLA, MJF), Microcontrollers (Arduino, ESP32)