# MARWAN HAGGAG

24mhaggag@berkeley.edu | +1(570) 990-9342 | www.linkedin.com/in/marwan-haggag


## EDUCATION

**University of California, Berkeley** exp. May 2028
- BA in Mechanical Engineering
- GPA: 3.82
- Regents' & Chancellor's Scholar & Yardi Scholar

**Cairo American College (CAC)** May 2024
- GPA: 4.01
- Outstanding Achievement Awards in Science & IB HL Design Technology

## INTERNSHIPS

**Aevumed, Inc.** Intern Summer 2025
- Designed & tested the Phantom Nano, an all-suture anchor, yielding a 50% higher pullout strength compared to competitors
- Performed passivation, deburring, & other precision workshop tasks, supporting prototype preparation & product development

**Brains & Motion Education,** STEM Instructor Summer 2025
- Led robotics, coding, & animation classes for 20 students in grades 3–8, delivering hands-on instruction & adapting lessons to varying skill levels

## EXPERIENCE

**UC Berkeley Space Technologies & Rocketry Club,** Member since Sep 2024
- Collaborated with team of 6 to construct a solid propulsion rocket reaching an altitude of 4000 feet
- Designed and optimized external piping and wiring system using hand calculations, custom Python optimization code, and SolidWorks FEA to ensure structural integrity under impact and flight vibration loads, while maintaining manufacturability and seamless integration with the LE3 rocket assembly.
- Supporting full rocket fabrication and assembly, including hands-on manufacturing of liquid-propulsion hardware and airframe structures for vehicle integration

**Autodesk,** Student Ambassador June 2025-
- Selected to promote Autodesk design tools at UC Berkeley through planning community events, workshops, networking with students & industry leaders, & engaging in the global Design & Make community

**Wind Turbine Project,** member December 2024
- Designed and validated a model wind tower in a 5-person team by researching turbine structures, modeling the full assembly in SolidWorks, performing FEA to guide structural decisions, and experimentally testing the prototype (3.55 N/mm stiffness, 0.5 W power output).

**Extendesk®**, Head Designer & Co-Founder 2023-2024
- Co-founded a startup that won 1st place at INJAZ Egypt, leading the mechanical design of a multifunctional portable desk attachment by developing CAD models, iterating physical prototypes, and applying tolerancing and manufacturability principles through hands-on fabrication and testing.

## SKILLS

- Computer-Aided Design: Solidworks, Fusion 360, Creo & OnShape
- Programming Languages: Python & MATLAB