Brindha Chandran

(408)-464-4967 ▪ www.linkedin.com/in/brindha-chandran ▪ brindharc116@gmail.com

Education

Purdue University   West Lafayette, IN
B.S. in Mechanical Engineering, Minor in Economics   Graduation: December 2027
GPA: 3.94 / 4   Dean's List & Semester Honors (3 / 3 Semesters)

Experiences

Purdue Office of Professional Practice   August 2025 - Present
Milestones CAD Teaching Assistant
- Assisted 80+ students learning CAD and 3D printing through Fusion360, emphasizing basic design principles

American Society of Mechanical Engineers   August 2024 - Present
Fuel Cell Team
- Researched implementation of short circuit humidification systems for an air-breathing hydrogen fuel cell
- Utilized Arduino microcontrollers to operate the air intake fans, simplifying the cathode entry system

RAINergy Team
- Collaborated with teammates to manufacture a wooden stand for a tank collecting purified rainwater from a roof
- Designed a hook to safely mount water tubing to a gutter system, allowing rainwater to flow smoothly
- Conducted FEA analysis to improve the stability of a water tank stand

Society of Women Engineers   January 2025 - May 2025
Sustainability Team - Setty Foundation Applied Engineering Challenge 2025
- Conducted life-cycle analysis for galvanized steel tubing to analyze the feasibility of an algae greenhouse
- Modeled algae grocers' profit margins to calculate the cost of setting up an algae system for carbon capture

Harker Robotics (FIRST Robotics Competition)   August 2020 - May 2024
Member - Design Director
- Led and contributed to designing, prototyping, and building a robot for three years in FRC, winning the Excellence in Engineering Award in 2022 and Impact Award in 2023
- Created the training curriculum and trained incoming members about robotics design and FRC concepts
- Directed the Harker team through a week-long FRC design competition

Projects

ME 264: Manufacturing for Mechanical Design   Fall 2025
- Created technical drawings and CAD to laser cut a desk organizer, simplifying the machining process

Matrix Analyzer (MATLAB)   Summer 2025
- Coded a program which calculates the eigenvalues, eigenvectors, and graph type of a 2x2 matrix

ENGR 132 - Autonomous Cruise Control Data Analysis   Spring 2025
- Analyzed autonomous cruise control system data to determine the safety of a manufacturer's change in tires
- Utilized MATLAB to smooth and graph data and calculate a model for the cars' acceleration
- Led teammates to synchronize coded subfunctions and create documentation for the project's major milestones

Commute GPS Data Analysis   Fall 2023
- Modeled car travel information in Google Sheets using GPS data to analyze its path, speed, friction, and drag

Robotics Hardware   Spring 2022
- Designed, modified, wired, and coded an arm as an extension for a tank

Skills

- CAD (Fusion360, Siemens Nx, SolidWorks, Onshape), Machining (CNC, sheet metal, woodworking, soldering)
- Python, Java, C, MatLab, Microsoft Office, Excel for data analysis and modeling