# Arushi Bharadwaj

bharad26@purdue.edu | +1-619-894-3438 | www.linkedin.com/in/arushi-bharadwaj-sd Honors Mechanical Engineering Student seeking research opportunities

#### **EDUCATION**

## Purdue University, West Lafayette, IN

August 2023-May 2027

Bachelor of Science in Mechanical Engineering | John Martinson Honors College

GPA: 3.6 / 4.0

Currently classified as a sophomore by credit hours; On track to be classified as a junior by May 2024

## Del Norte High School, San Diego, CA

**August 2019-June 2023** 

GPA: 4.3 / 4.0

National Merit Commended | AP Scholar with Distinction | National Honor Society | California ELC Recognized

#### RELEVANT COURSEWORK

Purdue University, West Lafayette, IN

Honors Engineering 16100 August 2023-December 2023

Milestones CAD/3D Printing Certificate Fall 2023

University of California San Diego, La Jolla, CA

Introduction to Mechanical Engineering and Materials Science (A+)

Problem-Solve like an Expert (A+)

Summer 2021

Summer 2022

Palomar Community College, San Marcos, CA

Introduction to Electrical and Computer Engineering (A) September 2020-April 2021

#### WORK EXPERIENCE

#### Cisco HS Internship/Shadow Program

#### Summer 2022

 Created a search engine website using Python and SQLite with a team of Cisco Engineers and Directors. Website allows employees to search for versions of software and bugs. Developed a VR classroom and presented at BridgeHacks Hackathon

## **Camp Invention Leadership Intern**

## Summer 2021

Taught students STEM topics such as mechanics, aerodynamics, structures, electrical engineering, and circuit boards

#### LEADERSHIP AND ACTIVITIES

## American Society of Mechanical Engineers (ASME)

#### August 2023 - Present

Grand Prix Vehicle Performance Team Member and ASME Executive Event Coordinator

- Using MATLAB to process sensor data and test kart for Grand Prix race. Optimizing chassis for braking, torsion on shafts, and steering control using microcontrollers and C programming
- Managing ASME website and organizing ASME events to communicate with current members and expand outreach

### **Purdue Solar Racing**

#### August 2023 - Present

Designed a double wishbone suspension prototype using Autodesk Fusion 360. Performed finite element analysis on front and rear suspension. Fabricating suspension parts using computer-aided manufacturing

## **Purdue Society of Women Engineers (PSWE)**

August 2023 - Present

Outreach Chair Executive Assistant

Working on engineering projects with Team Tech. Mentoring young girls who are hoping to pursue engineering

## **FIRST Robotics**

## June 2016 - June 2023

Senior Build Team Leader

- Earned the Engineering Inspiration Award (2023) and Chairman's Award (2022). Qualified for the FRC World Championships.
- Led team members to implement vision processing software on the robot. Coordinated manufacturing of robot

## Zero Degree Lab

# February 2021 - Present

Founder and President

- Collaborating with Zero Degree Collaboratory at Stanford University to establish the first ZD Lab in the world
- Creating an app using Javascript and Python that inspires people to reduce their greenhouse gas footprint

## Cal Poly Engineering Possibilities In College

## Summer 2022

Researched how to incorporate Machine Learning, Neural Networks and Artificial Intelligence into cancer detection software