Aditya Suresh Nale

E-mail: adityanale95@gmail.com | LinkedIn: linkedin.com/in/aditya-nale-46a716339
Address: Pune, Maharashtra

Summary
Mechanical Engineering student with strong foundations in mechanical engineering principles, CAD, and programming.

Education

B.E. Mechanical Engineering — Sinhgad College of Engineering, Pune
Current CGPA (3rd Year): 7.79 — 2022-2026

H.S.C. — MIT Jr. College, Pune
Percentage: 83.83 — 2019-2021

S.S.C. — St. Anthony High School
Percentage: 79.40 — Completed: 2019

Skills

- CAD:
  - Proficient in Onshape for 3D modelling and assemblies.
  - Used it for academic projects and design assignments.
- Electronics:
  - Proficient in working with microcontrollers (Arduino, esp8266) for embedded systems projects and IOT.
  - Hands-on experience with interfacing sensors and actuators in academic projects.
- Programming Languages:
  - C, C++ (used with software projects and microcontroller programming)
  - Python (data analysis using pandas, numpy and scipy for numerical methods)

Projects

Adaptive Robotic Gripper
Designed a robotic gripper capable of adjusting its grip based on the shape of the object being held. Created multiple design iterations in **Onshape** to fix issues. Used **arduino** and servo motors to create a working prototype. It received 1st place in the college's Project Based Learning competition.

Physics Simulation Program
Developed a program in **C** that takes 2D velocity vectors as input and visualizes the resulting motion in real-time using SDL. Available at https://github.com/aditya-95/PBL

RFID Attendance Logger
Developed a fully automated RFID based attendance logger using MFRC522 sensor and **ESP8266** which transmits card data to a **python** HTTP server. The server listens to incoming requests and stores data in a SQLite3 database with a simple web interface for searching the records.