# ARYAN GUPTA

 $(+91)9811128293 \Leftrightarrow aryanguptaleo@gmail.com$ 

#### **EDUCATION**

Indian Institute of Technology Delhi

July 2018 - Present Bachelor of Technology Mechanical Engineering CGPA: 9.12 (Present) Delhi Public School R.K. Puram

April 2014 - April 2018 Class XII: 96.4% Class X: 10 CGPA

# SCHOLASTIC ACHIEVEMENTS

Certification of Merit: Amongst the top 7 percentile of students from 2018 entry batch in the 2nd Semester of 2018-2019

Department Change: Amongst the 5% of students who got their department changed at the end of first year

Department Rank: Ranked 5th amongst 77 students in the Mechanical Engineering Department

**JEE Advanced**: Ranked **2969** among 225 thousand eligible candidates

JEE Mains: Ranked 2043 among 1.1 million candidates

#### **PROJECTS**

Portfolio Creator DevClub, IIT Delhi

• Designed a web app to enable IIT Delhi students to register, create and share their own online portfolio website

• Incorporated React JS along with Google material design to create an elegant user interface

• Ensured smooth data handling with a systematic control flow of user data

#### Holonomic Mecanum Wheel Robot

Robotics Club, IIT Delhi

- Designed and manufactured 4 Wheeled Mecanum semi-autonomous drive to compete in DD-Robocon 2019
- Implemented a picking and throwing mechanism for an irregular curvilinear object with a throwing range of 2 metres
- Incorporated feed-backs from Encoders, Ultrasonic Sensors and IMU to provide effective control and navigation

# 4 Legged Minitaur Robot

Robotics Club, IIT Delhi

- Designed and Manufactured an autonomous robot similar to Stanford's Doggo Robot to compete in DD-Robocon 2019
- Used a Raspberry Pi to control Dynamixel Motors which were guided by Torque Sensing Algorithms developed in Python

# Symbolic Differentiator

Prof Subhashis Banerjee, IIT Delhi

- Worked on a symbolic differentiatior that could parse the input and return its derivative.
- The program was modular, supported a wide variety of mathematical operations, and could be extended further.

#### **Emergency Buzzer Circuit**

Prof. M. Veerachari, IIT Delhi

• Created a buzzer circuit which could be integrated in various everyday applications

#### TECHNICAL STRENGTHS

Web Development HTML, CSS, Javascript, Jquery, SQL, PHP, Express, Node JS, React JS, Git

**Programming Languages** Python, C++, SML

Software & Tools MS Office, Autodesk Inventor, Autodesk Fusion, Blender, Adobe Illustrator

# EXTRA CURRICULAR ACTIVITIES

Techfest IIT Bombay — Line Follower Maze Solving Robot

- Designed a differential drive line following robot using Arduino Mega Microcontroller
- Implemented Graph Theory and modified Dijkstra's Algorithm to solve and find the shortest path in the line maze

Robocon 2019 — Integral part of the team that represented IIT Delhi

- Competed at a National Level with teams from various colleges all across India
- Designed two robots (autonomous and semi-autonomous) that worked together to solve a given problem statement

# POSITIONS OF RESPONSIBILITY

Aquatics Captain - Shivalik Hostel — Incharge of all Aquatic Events on behalf of Shivalik House

• Successfully led the 11 member Shivalik Aquatics Contingent in the Inter Hostel Aquatics Championship

Public Relations Executive - Mechanical Engineering Society (MES) — Integral part of the society that oversees events pertaining to the Mechanical Engineering Department

- Part of the team that organised the Fresher's Party for the 2019 Entry students of Mechanical Engineering department
- Responsible for maintaining the MES website

Web Executive, Robotics Club Responsible for maintaining the Robotics Club website

Developer - DevClub A vital member of IIT Delhi's Software Development Club