

Aryan Ajit

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EDUCATION

Fall 2023 – Current

Georgia Institute of Technology
George W. Woodruff School of Mechanical Engineering
B.S in Mechanical Engineering
Cumulative GPA: 4.00

Atlanta, GA
Class of 2025
Dean's List

Fall 2021 – May 2023

The Pennsylvania State University
School of Science, Engineering, and Technology (SSET)
B.S. in Mechanical Engineering, Minor in Mechatronics
Cumulative GPA: 3.72

Harrisburg, PA
Dean's List

INTERNSHIP EXPERIENCE

Bhartia Medicare Services

Mechanical Engineering Intern

Nagpur, Maharashtra, India

July 2022 - August 2022

- Underwent training in production of pure oxygen and nitrogen gases, and attended the cylinder hydraulic testing station, where gas cylinders are assessed periodically as per the guidelines issued by the Department of Explosives of Government of India.
- Updated about Liquid line of oxygen inlet and outlet and at what pressure the pump is compressing in gaseous mode.
- Collaborated closely with a senior engineer to craft comprehensive schematics for the layout of pure oxygen manufacturing gas pipelines.
- Learned more about: Hydraulic Systems, Manifold & Control Valves, Evaporators, Air Separation, Gas Pumps & Pipeline Systems, Gas Processing.

Trinity Mechanical Services

Mechanical Engineering Intern

Dubai, U.A.E

May 2022 - June 2022

- Explored and learned about all the various machines used, both conventional and CNC, to perform automobile engine parts maintenance and production.
- Received first-hand training from experienced mechanical engineers regarding workshop safety, tool & machine handling, and automobile engine components overhauling.
- Learned more about: Internal Combustion Engines, CNC Machining, Using Lathe Machines, Main Automotive Engine Parts, Automotive Engine Parts Refurbishing, Using CAM Software.

Diesel Marine International Dubai LLC

Mechanical Engineering Intern

Dubai, U.A.E

May 2022 - June 2022

- Experienced various welding procedures used along with conventional machines to maintain and refurbish marine engine components.
- Supervised by a Mechanical Engineer when performing initial and final inspection of repaired engine parts.
- Learned more about: Surface Engineering, Heat Treatment, Sandblasting, Thermal Spraying, Plasma, Arc, MIG & TIG Welding, Marine Engine Components, Marine Engine Reconditioning, Exhaust Valve Repair.

Blue Light Industry L.L.C

Mechanical Engineering Intern

Dubai, U.A.E

May 2022 - June 2022

- Learned about the numerous chemical compounds and solutions used for plating mechanical parts along with their beneficial effects and observed the various plating processes.
- Gained an understanding of all the metal casting procedures by experiencing them first-hand.
- Worked with a technician to create casting molds with sand and wood using CNC machining with CAM software.

RESEARCH EXPERIENCE

Penn State University
Undergraduate Research Assistant

Harrisburg, PA
May 2023 - July 2023

- Participated and won a \$4000 scholarship for performing research on Mechanical Properties of Bone Scaffolds in Tissue Engineering under a reputed faculty in the Multi-Campus Research Experience for Undergraduates (MC REU).
- Used Python to develop image processing machine learning algorithms to automatically scan cross section images of bone scaffolds modeled in SOLIDWORKS and report accurate mechanical strength measurements.
- Helped streamline the bone scaffold manufacturing process by eliminating the need for hours of physical and manual laboratory strength testing.

SKILLS

- **Lab:** Horizontal and Vertical Turret Lathe, Drilling, Boring Machines, TIG, MIG, Submerged Arc Welding.
- **Instrumentation:** Calibrating and reading of digital multimeter, vernier caliper, screw gauge, electronic scales.
- **Programming:** Python, MATLAB, Arduino, Scratch
- **Software:** SOLIDWORKS, National Instruments ELVISmx, Adobe Creative Suite, Microsoft Office Suite
- **Linguistic:** English (Fluent), Hindi (Native), French (Intermediate), Arabic (Intermediate), Spanish (Basic)

ACADEMICS & HONORS

- Present on the Dean's List consecutively for all four semesters at Penn State University
- Inducted into the Capital College Honors Program at Penn State University.
- Member of the NSLS Honor's Society.

PROJECTS

- Participated in Robotics club and used Lego MINDSTORM EV3 robotic kits to build robots part by part and scripted them to conduct a plethora of fundamental tasks.
- Made a functioning electromagnetic maglev train using copper wire, n52 industrial grade neodymium magnets and a battery.
- Participated in 3D Printing club and used AutoCAD and 123D Design software to design and model incredibly useful objects, stationery, and toys.
- Attended the summer camp offered by Emirates Aviation University in Dubai, U.A.E, and took part in various activities like building and programming a drone from scratch, designing a homemade water-propelled rocket, and scripted an Arduino line-following robot.
- Modeled a jet aircraft in SOLIDWORKS, then 3D printed, and attached motors with propellers to it to demonstrate the concept of thrust vectoring.
- Used Adobe Premiere Pro to create an informative video containing footage of me modelling, printing, and using a mug to demonstrate the practical application and usage scenarios of 3D printing.

VOLUNTEER & LEADERSHIP

Penn State University

Harrisburg, PA (2022)

- Collaborated with the Math club board to orchestrate a grand campus-wide adventure-puzzle extravaganza for club members, students, and faculty.

Penn State University

Harrisburg, PA (2021)

- Assisted local families in harvesting apples from a community orchard and preparing apple pie for dinner.

Manzil School for Special Needs Children

Dubai, U.A.E (2020)

- Donated masks and sanitizers to combat the outburst of the Covid-19 pandemic.

Transguard L.L.C

Dubai, U.A.E (2019)

- Organized and handed out food and drinks supply to exhausted participants in the Carnival for Blue Collar workers.