SAHIL T CHAUDHARY

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EDUCATION

Carnegie Mellon University | *Pittsburgh, PA* *August 2023 – December 2024*
Master of Science in Mechanical Engineering – Applied Advanced Study

Vellore Institute of Technology | *Vellore, India* *July 2018 – August 2022*
Bachelor of Technology in Mechanical Engineering
- GPA: 9.05/10

PROFESSIONAL EXPERIENCE

ArcelorMittal Nippon Steel India Limited | Hazira, Gujarat, India *June 2022 – March 2023*
Graduate Engineer Trainee – Corex Operations
- Ensured the smooth running of different processes such as conveyors, skip charging, coal blending, coal drying, slag granulation plant, and machinery involved in all the areas within Material Handling and the Corex Process
- Assisted and collaborated with Field Engineers to resolve problems such as malfunctioning, errors or issues with the equipment and machinery, ensuring safety, and productivity of the Plant

Maruti Suzuki India Limited | Gurgaon, Haryana, India *July 2021 – September 2021*
Intern – Energy Control Department
- Trained in Energy Auditing and Management, and thereby prepared a report on the same
- Learnt evaluating the performance of Boilers, improving their efficiency, and identifying energy conservation opportunities

ACADEMIC PROJECTS AND PAPERS

Re-sizeable Autonomous Cleaning Robot | *Vellore Institute of Technology, India* *January 2022 – April 2022*
- Designed and developed a Cleaning Robot that can re-size itself (between 30 cm and 50 cm length), using Fusion 360
- Developed a physical prototype using Raspberry Pi 4 and conducted a simulation study using SolidWorks and V-REP
- **Tech Stack:** Fusion 360, SolidWorks, Ansys, CoppeliaSim (V-REP), Raspberry Pi, Python [GitHub]

Quadruped Robot | *Vellore Institute of Technology, India* *June 2021 – October 2021*
- Designed a Quadruped Robot with SolidWorks, by redesigning the legs with RRR configuration to increase total workspace
- Obtained the stable workspace of the robot with the redesigned legs using MATLAB
- **Tech Stack:** SolidWorks, MATLAB, PyBullet, Python [GitHub]

Prosthetic Arm| *Vellore Institute of Technology, India* *January 2021 – April 2021*
- Fabricated a cost-effective Prosthetic Arm using SolidWorks and 3-D printing (using ABS)
- Reduced the material cost of the Prosthetic Arm using Topology Optimization
- **Tech Stack:** SolidWorks, Raspberry Pi, Python, Additive Manufacturing [GitHub]

Compact Foldable Treadmill | *Vellore Institute of Technology, India* *August 2020 – November 2020*
- Created an easy to store, compact, and foldable Treadmill using SolidWorks
- Conducted Stress Analysis with Ansys, to determine the Fatigue Life, and got a Factor of Safety of 4
- **Tech Stack:** SolidWorks, Ansys [GitHub]

Benefit of Computer Assisted Language Learning (CALL) | *Vellore Institute of Technology, India* *January 2019 – April 2019*
- Performed a literature review and research from different papers and journals for drafting the paper
- Authored and published a paper on the same in international journal JOELL Veda Publications under Prof. V. Anitha Devi in April 2019, ISSN:2349-9753 (Vol. No-6, Issue No-2, pp. 10-13) [GitHub]

TECHNICAL SKILLS

- **Programming Language:** Python | MATLAB | C++ | R
- **Tools/Technology:** SolidWorks | Ansys | Fusion 360 | CoppeliaSim (V-REP) | Git | MS Office

EXTRACURRICULAR ACTIVITIES

- Received SolidWorks Associate (CSWA) Certification from Dassault Systemes, October 2019
- Selected as a Cadet in VIT-NCC (National Cadet Corps) for Republic Day and Independence Day Parade Contingent, 2019
- Joined as a Core Member of SAE-VIT student chapter, and hosted Tech Talks, gathered sponsorships for Automobile workshop, IDRL and Aerodominator events, and obtained components for Aeromodelling Workshop by SAE-VIT, 2019
- Participated in several Hackathon, such as Hero Campus Challenge Season 6 organized by Dare2Compete, 2019 and collaborated as a team member in order to brainstorm and come up with a solution to the problem statement
- Partaken in VIT 2K20 Marathon (10km) as a part of Riviera 2k20 (Cultural Fest), themed-Run for Cancer, 2020
- Completed courses on Python (Udemy-February 2020), Machine Learning with Python (EdX and IBM-May 2020), Programming in R (VIT Vellore-June 2020), Introduction to Self-Driving Cars (University of Toronto and Coursera-July 2020), and gained proficiency in coding, Machine Learning algorithms, and working on Autonomous Vehicles