Sushmit Dutta

sushmitdutta.com | sushmitsdutta@gmail.com | (339) 204 3920 | linkedin.com/in/sushmit-dutta

EDUCATION

OLIN COLLEGE OF ENGINEERING | Massachusetts, US — May 2024
Bachelor of Science in Mechanical Engineering *(GPA: 4.0)*
- Recipient of merit $100,000 scholarship

Relevant Coursework: *Mechanics of Solids & Structures, Linear Algebra & Machine Learning Algorithms, Principles of Systems Engineering, Modelling & Simulation of Systems, Design Nature, Software Design*

SKILLS

- Machine Shop : CNC, Mill, Lathe, MIG & TIG Welding, 3D Printing, Laser Cutting
- Applications : SolidWorks, ANSYS, Fusion360, KiCad, OpenRocket, RASAero, Adobe Creative Cloud
- Software : MATLAB, Python, Java, JavaScript, React, Gatsby, HTML, Shell, Git

EXPERIENCE

AI ROBOTICS | Singapore, SG — Jun 2021 - Present
Systems Engineering Intern
- Start-up building a Level 4 autonomous solution for geo-fenced premises
- Designed tests for the deterministic algorithm used by the on-board sensors for 1,500 simulations
- Led a marketing campaign (website development, promotional video) to attract investors
- Co-ordinated with accelerators for Seed A funding to build test facility and manufacture initial prototypes

ACCENTURE | Singapore, SG — Jun 2021 – Aug 2021
Sustainability Consulting Intern
- Reported on Environmental, Social, and Corporate Governance (ESG) outlooks of banks in South East Asia
- Developed an ESG comparison metric to rank companies in their respective fields
- Advised banks in South East Asia on ways to build a green portfolio using sustainable metrics
- Presented research at the Strategic Point conference in Asia to represent Accenture

OLIN ROCKETRY | Massachusetts, US — Sep 2020 - Present
Recovery Team Lead & Systems Engineer
- Built a 10,000ft M class rocket to compete at the Intercollegiate Rocket Engineering Competition
- Research & developed the recovery system with regards to the safety and reliability requirements of the team
- Conducted Finite Element Analysis on the system using SolidWorks and ANSYS to ascertain flight safety

PROJECTS

- **Batch-Reverse Osmosis Research** : Prototyping and manufacturing a reverse osmosis system on a MIT research team to compete in the 'More Water' competition by NASA
- **Redox Battery Research** : Researched with 2 PhD candidates on methods of extending the lifespan of redox lead-acid batteries used in developing countries at the National University of Singapore
- **Environmental Consulting @ Olin** : Working alongside students, facilities, and administration to construct a framework to cut down on college move-out waste and setting up sustainable channels of recycling
- **Smart Mirror using JavaScript** : Designed and created a smart mirror that can be controlled through voice modules and displays modules such as time, weather, calendar, and news using JavaScript, and Python
- **Handwriting Recognition Algorithm** : Created an optical character recognition software using eigenvectors and the Fisher Face algorithm on MATLAB