Purva Pratapwar | ME22B179 | IIT Madras | LinkedIn | Github **EDUCATION AND SCHOLASTIC ACHIEVEMENTS Program** Institution **CGPA / Percentage** Year **B.Tech in Mechanical Engineering** Indian Institute of Technology Madras 7.32/10 2026 87.83% 2022 XII (CBSE) Vishwanath Appa Hurne College X (CBSE) Mahatma Phule English School 2020 98% • Secured Taluka Rank of 3 in class X and gained 100% in Maths. • Attained 190/200 in Computer Science in Class XII. • Attained qualification for Stage-2 of Homi J. Bhabha Balvaidnyanik exam. • Secured 98.40 percentile in JEE Mains, attained category rank of 1247 in JEE Advanced. **Scholastic Achievements** • Scored 99.2 percentile in State Common Entrance Test Cell (CET). Amongst top scorers in NSSE(National Talent Search Exam) twice. • Bagged Gold, Silver, and Bronze Medals in SOF exams. • Bronze Medal in BDSE(Brain Development Scholarship Exam). **SKILLS** Coding Skills: Python, C++(basics), DSA in Python, HTML, CSS, Linux OS (Bash Module), C++\*\* Tools & Softwares (Technical): Git, GitHub, Latex, Excel, PowerPoint, AutoCAD, MS Word, VScode, GeoGebra. Tools & Softwares (Design): Canva Pro, Figma, Illustrator, Photoshop, MS Clipchamp. **PROJECTS** • Developed an interactive tic-tac-toe game using **Python**. **Tic Tac Toe** Self Project Utilized basic sequential decision-making algorithm to make the game user-friendly. • Created a responsive collapsible **personal portfolio website** (Link) **Portfolio** • Developed frontend of a website using **HTML**, and **CSS** ensuring a functional website. Self Project Designed a user-friendly interface for gathering input from users. • Built a system that minimizes cash flow in group of people. **Cash Flow Minimizer** • Utilized basic min-max algorithm to minimize the cash flow in the group. Self Proiect • Utilized a **2-dimensional array** representing a transaction matrix between people **Ball Screw Design System**  Led comprehensive analysis of Ball Screw Design System by researching on the system. • Developed Matlab codes for relevant graphs, and designed Simulink Model of the system. Course Project • Deployed the model based on how controllers and stepper motors drive the system. (Measurements, Instrumentation and Developed a standard report on the given thesis including all the necessary derivations Control) Aircraft Bin Mechanism • Developed a physical model of the mechanism inside of aircraft bin using laws of physics. • Created a Matlab code for the simulation and animation of the mechanism. Course Project • Included codes for calculation of the derivates of motion like acceleration, velocity, etc. (Kinetics and Dynamics of Machinery) RELEVANT COURSEWORK ID2090 A Scientific Computing Course (used Linux OS) completed in Semester 1. Introduction and basics of C++ Language (completed in 12th grade) **Computer Science** Differential Equations **Functions of Several Variables** Principle of Economics Series and Matrices **POSITION OF RESPONSIBILITIES** • **Design Core** of the Branding Vertical of TechSoc Team. **TechSoc** Co-Curricular Current • Will be leading the **2-tier** team's vertical of the club **single-handedly**. Secretary Shaastra O&IP • Volunteer of Shaastra (Tech-fest) Operations & Infra Structures Team. Dec22'- Jan23' • Handled on-ground operations in Tech Fest, Shaastra. • Creative Cell Coordinator at Extra Mural Lectures team. Extra Mural • I have been a **team leader** and held up an event solely. Lectures(EML) • Conducted 15+ events of renowned personalities like Dr. S Somnath, K. Annamalai. Team Student • Garnered an overall footfall of 5000+ people as a Creative Cell Coordinator. Apr23'- present General • Moderated the lecture by Dr. Prakash Baba Amte & Dr. Mandakini Amte. Secretary • Super-Coordinator of Design & Publicity Vertical of team Saathi. Saathi Team (current) • Member of the Student Executive Committee (SGS) Team. SGS ExecutiveTeam • Helped in the management of the Institute level events. May23'-April24' • Coordinator of the Drama Club in the Institute. **Drama Club** Cultural • Handled PR and Publicity tasks for 5+ events among the events held by the Club. **Secretary** May23'-April 24' **EXTRA-CURRICULAR ACTIVITIES** • Inter-IIT (2023) Street Play participant. Literary and Speaking Arts • Part of 10+ drama events in school, one of the lead actors of Initiator Event of Drama Club. • District-level long-run winner and secured 1st place in Kabaddi. **Sports**  Secured 2nd and 3rd place in dance competitions and sketching competitions. Other • Won "Student of The Year" Award twice, served as Team leader for 3 years in school.