## PURVA PRATAPWAR | ME22B179 | IIT MADRAS | LinkedIn | Portfolio

No. of the last

PURVA PRATAPWAR   ME22B179   IIT MADRAS   LinkedIn   Portfolio					
EDUCATION AND SCHOLASTIC ACHIEVEMENTS					
Program		Institution	CGPA / Percentage	Year	
B.Tech in Mechanical Engineering		Indian Institute of Technology Madras	7.4/10	2026	
XII (HSC)		Vishwanath Appa Hurne College	87.83%	2022	
X (SSC)		Mahatma Phule English School	98%	2020	
Scholastic Achievements		2 percentile in Maharashtra State Con		` ,	
● Attained qualification for <b>Stage-2</b> of the 3 stages in Dr. Homi J. Bhabha Baivaidhyanik examination					
		PROFESSIONAL EXPERIE			
Bank of New York (BNY)					
Software Development					
Intern	• Integrated Jira REST APIs to bulk-fetch vulnerability JSON payloads with the custom query filters				
[June-July'25]	• Added one-click <b>Jira creation</b> that reduced manual work and improved the issue tracking by ~90%				
	● Delivered impact reduced ETL effort by 87% and achieved ~80-90% data accuracy and consistency				
PROJECTS					
Book Recommendation	A recommendation engine to <b>suggest books</b> based on users' past interactions with the target items				
System	Built a recommender using <b>K-Nearest Neighbors</b> with Euclidean distance to recommend the books  A ship and 250/				
	• Achieved ~85% recommendation accuracy and enhanced personalization and the book suggestions				
	Al-powered personalized Spotify playlist generator by analyzing faces, voice, or manual mood input				
SpotyMood	<ul> <li>Developed interactive Dash + Flask web app for mood detection and then Spotify playlist creation</li> <li>Achieved mood detection from user's text or voice input by using libraries like Whisper and Pyaudio</li> </ul>				
	Built a playlist generator integrating <b>Spotify's API</b> with a custom mood-based audio feature analysis				
	Built fraud detection system with ROC-AUC using SMOTE-balanced XGBoost, beating other models				
Credit Card Fraud Detection	Prepared data using pandas and scikit-learn for scaling (SMOTE) imbalanced transactions in data				
	• Trained & compared LogisticRegression, RandomForest and XGBoost with ROC-AUC evaluation				
	Optimized by tuning XGBoost using GridSearchCV and saved best model with joblib for prediction				
YouTube Clone	Developed a YT clone with search functionality in <b>Python (Dash)</b> , integrated <b>YouTube &amp; Google APIs</b>				
	<ul> <li>Built YouTube clone with Dash Bootstrap, focusing on search to avoid shorts and feed's distractions</li> <li>Used YouTube API for search results and added voice search by using the Google Assistant API</li> </ul>				
	Implemented Google Sign In using Firebase AUTH & utilized SQLite to store the user preferences				
Grocery App	An Interactive Grocery app to keep record of customers and maintain their orders in the grocery store				
	Built the backend using Python; JS, CSS, & HTML for frontend; MySQL for database management				
	• Created schemas and related tables, integrated Python Flask, MySQL server by MySQL connector				
	Created an API to delete & insert products, total price, product list & order list in tables using Python				
	Smart Expense Tracker with Dash, Plotly & Snowflake-Ready architecture for efficient management				
Expense Tracker	<ul> <li>Built an interactive expenses dashboard with Dash, Plotly, and Pandas featuring real-time updates</li> <li>Implemented JSON data persistence, dynamic callbacks, and input data validation using Dash state</li> </ul>				
	<ul> <li>Designed modular UI with custom CSS, responsive layout, and category-wise charts for the analysis</li> </ul>				
SKILLS AND COURSEWORK					
Coding Skills	Pvthon, C++*	*, DSA, HTML, CSS, JS*, MySQL, Ma		. Java*. ReactJS*. NodeJS*	
	•	nowflake, Dataiku, Git, GitHub, LaTeX,			
Tools & Softwares	GeoGebra, Jupyter Notebook, IDEs, Canva, Figma, Illustrator, Photoshop, MS Clipchamp, Powerpoint				
Libraries & Frameworks	Pandas, Numpy, Matplotlib, Joblilb, SQLAlchemy, Requests, SciPy, Scikit-learn, Plotly; Dash, Flask				
Coursework	Functions of	Several Variables, Linear Algebra, Sei	ries and Matrices, Differ	ential Equations	
Coursework	Scientific Computing: Covers Linux programming, Octave, GPU computing, visualization, & LaTeX				
POSITION OF RESPONSIBILITIES					
TechSoc		esign Vertical in TechSoc, maintained			
(Aug'24-May'25)	<ul> <li>Led a two-tier branding team independently and managing design workflows and mentoring juniors</li> <li>Creative Cell Coordinator at EML: hosted events, managed publicity &amp; handled 5000+ attendees</li> </ul>				
Extra Mural Lectures(EML) (Apr'23-May'24)					
	<ul> <li>Led publicity activities for 15+ talks featuring the speakers like Dr. S. Somanath and K. Annamalai</li> <li>Moderated the lecture by Padmashri Awardees Dr. Prakash Baba Amte and Dr. Mandakini Amte</li> </ul>				
Saathi Team	Super-Coordinator of Design & Publicity Vertical of team Saathi for handling all outreach events				
(Aug'24-May'25)	collaboration with the team				
Drama Club		or of Drama Club, managing PR, part			
(May23'-April24)		I theatre arts events at the cultural fest			
Shaastra O&IP	<ul> <li>Volunteered in Shaastra's Operations &amp; Infrastructure team for assisting with the event logistics</li> <li>Managed on-ground coordination, coordinating 10+ vendors along with serving 30K+ attendees</li> </ul>				
(Dec22'- Jan23')	● iviariaged c			un serving <b>sun+ attendees</b>	
EXTRA-CURRICULAR ACTIVITIES					
• Performed in Inter IIT Street Play for IIT Madras (2023 & 2024), demonstrating strong stage presence and public speaking skills					

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   Participated in multiple Toastmasters Club events, developing strong communication, public speaking, and the leadership skills
- Won 1st place at the district level in long-distance running and Kabaddi, showcasing the athletic performance and team spirit
- Received "Student of the Year" award successively 2 times for academic achievements and consistent excellent performance
  - \*: Beginner Level | ETL : Extract, Transform, Load | IDEs: Integrated Development Environment