Gagandeep | CH21B037 PR/11/CH/25/037



Indian Institute of Technology Madras					
EDUCATION					
Program			Institution	CGPA/%	Year of Completion
B. Tech in Chemical Engineering		Indian Ins	itute of Technology Madras	6.79	2025
12 th (RBSE)		G.S.S.S Hanumangarh Town Rajasthan		92.8	2020
10 th (RBSE)		G.S.S.S Pilibanga Rajasthan		86.17	2018
	• Solved 250+ competitive problems of Data structure & Algorithm and SQL on leetcode, Gfg and HackerRank.				
Scholastic	• Selected in the Interstate Cultural Tour, organized by the Rajasthan state government. (Only one from every District)				
Achievements	 Received the FFE Scholarship, recognizing outstanding academics with an amount of 2.4 lakh and skill trainings 				
Successfully selected for the Service Selection Board , a recommendation letter for Officer entry in the Indian Army					
COURSEWORK & SKILLS					
Coursework	Full-stack Web develo	•	Functions of Several Variables	Python in Data science*	DBMS*
	Intro to Data structure		Computational Thinking	Principle of Economics	Series and metrices
Skills & Tools	Programming Languages – C, C++, Python, HTML, CSS, JavaScript ES6, SQL, PHP				
	Libraries & Frameworks - React.js, Bootstrap, Node.js, Express.js, NumPy, Pandas, Matplotlib, PyTorch				
	Tools – Figma, PostgreSQL, MYSQL, Excel, Git, GitHub, Spider, Jupyter Notebook, Tableau, Powerbi, PyCharm				
	Skills - Machine learning, Statistics, Probability, Basic linear Algebra, API integration, Object oriented Programming				
PROFESSIONAL EXPERIENCE					
Developing an 8-section website for IIT Madras Professor, showcasing his work and streamline communication with st					
Full - Stack	Designed and successfully implemented a comprehensive 8-section website layout using HTML, CSS, and JavaScript				
Intern	Built a Research section with 6 detailed pages featuring embedded images, using Bootstrap for responsive design				
BASA Lab	Optimized database tables and relationships to enhance CRUD operations, data retrieval, and management efficiency				
June '24 – Aug '24	Developed a highly secure News section with a hidden login feature and submission forms using Node.js and MySQL				
PROJECTS					
Personal Income	Completed a classification project for predict personal income levels using Logistic Regression and K-Nearest Neighbours.				
	 Analysed a dataset with 13 variables and 31,978 records, focusing on preprocessing, feature selection, and cleaning. 				
	Built and compared model accuracy to support Subsidy Inc. in effective subsidy planning and misuse prevention.				
Classification	• Evaluated and validated model performance, ensuring it met the necessary assumptions for reliable deployment.				
Car Price Prediction	Built a linear regression model using data from 10,000 used cars to predict prices, achieving an R-squared value of 0.85				
	 Thoroughly cleaned data by handling 5% missing values and encoding 10 categorical variables for better model training 				
	• Effectively used pandas and scikit-learn to load and prepare the dataset, reaching a MSE of 2500 on the test set				
	 Applied feature scaling and normalization, improving model performance by 15% and enhancing prediction accuracy 				
	Utilized SQL and relational databases to analyse customer and transaction data, generating key revenue insights.				
Sales insights Data Analysis	Queried and filtered Chennai market transactions to identify distinct products sold.				
	• Analysed US dollar transactions and calculated total revenue for current year, including July month, using SQL .				
	• Aggregated sales data with INNER JOIN and visualized results in Tableau for enhanced reporting and financial reporting.				
Library	Developed a Library N	Management Sys	em to automate book and stude	nt record management using	g C++
Management	 Ensured data integrity with input validation and efficient file management, storing some data directly in the code. Designed a user-friendly console-based interface for seamless book issuance, returns, and administrative tasks 				
System					
(OOPs C++)					
	Developed a web app	lication to visual	ize the working of sorting algorith	ims <u>Visualise</u>	r Frontend Interface
DSA Sort		_	rator for step-by-step envision of		•
Visualizer	• Implemented fully adjustable speed and size parameters to handle up to 1000 elements with varying 1x to 10x speed				
Hosted the interactive web application and deployed the project code repository on GitHub for public access					
POSITION OF RESPONSIBILITY					
D&B Coord	Coordinated Robo Ocean 2023 competition sponsored by Caterpillar Inc., engaging 80+ participants and 20+ tea				
Shaastra 2022-	Managed competition logistics, ensuring 99.9% seamless execution of 2 rounds, with 100% team participation				
23	Oversaw team of 5 volunteers, communicating with 200+ participants, painted and designed arena in IITM Worksho				
AcadBuddy					
Saathi	Proactively provided past resources, answered academic questions, and supported other academic needs				
EXTRA-CURRICULAR ACTIVITIES					
Volunteer	• Saathi, IITM: Gui	ided 50+ fresher	during registration; assisted par	ents with admission process	and required doc

Saathi, IITM: Guided 50+ freshers during registration; assisted parents with admission process and required doc Volunteer

Mitr, IITM: Promoted mental health awareness by executing 5 programs in 5 days across various campus locations

Earned a B Certificate (A grade) in NCC and attended a National Camp in Tambaram, excelling in drills and parades.

Participated in skeet shooting during camp, firing 20+ rounds with 0.22 Deluxe and DBBL guns and other activity.

Hobbies Enthusiastic about sci-fi web series, contributing to open-source projects on GitHub, and exploring various Al Tools

Sports Played Kabaddi and cricket in village tournaments, developing teamwork and athletic skills and also like running

DBMS – Database management system | | RBSE – Rajasthan state Board Exam | | D&B – Design and Build | | Basa Lab – Under Chemical Department of IIT Madras | | CRUD – Creation Read Update and Deletion

NCC