Utkarsh Jain

+91 8630116269 | 1by23cb059@bmsit.in | linkedin.com/in/utkarsh-jain | github.com/Utkarshjain1217

Education

BMS Institute of Technology and Management

Class of 2027

Computer Science and Business Systems | CGPA:8.59

Bengaluru, KA

Shivalik Public School

Class of 2027

Senior Secondary High School – CBSE | Grade: 87%

Agra, UP

Certification

Ask Questions to Make Data-Driven Decisions

Issued Apr 2025

Foundations: Data, Data, everywhere

Issued Apr 2025

Technical Skills and Interests

• Languages: Python, C++, C, HTML, CSS, JavaScript, Framework: React, Flask.

- Database: MySQL, MongoDB.
- Machine Learning: Basic concepts, Yolo v8, TensorFlow, Deep Learning.
- Data Analytics: Pandas, NumPy, Excel, Power Bl.
- Fundamentals & Tools: OOPs, DBMS, Financial Management, Operating System, Git, Github.
- Area of Interest: Finance (actively exploring the Quantitative Finance fundamentals)

Experience

MEMOC

17/10/2024 - 31/01/2025

- Contributed to an international R&D project at MEMOC focused on corrosion prediction in oil & gas production units using deep learning.
- Developed computational models to assess the combined impact of velocity, salinity, and CO₂ concentration on corrosion across downhole, flowline, and pipeline systems.
- Utilized Deep Learning, Python, and Data Analysis for predictive modeling and performance optimization in O&G corrosion forecasting.

Testaing 28/07/2025 – Present

- Designed and implemented an end-to-end vessel scheduling system using constraint and linear programming (Google OR-Tools) to optimize ship loading/unloading operations.
- Integrated ship draft, DWCC/DWT, and port geolocation data to compute optimal cargo tonnage, minimize berth delays, and improve overall fleet utilization.
- Automated monthly schedule generation with clean, structured CSV/Excel exports for data-driven planning, route visualization, and decision support.

Projects

Aadhaar card Validation | GitHub Code

- Designed a web-based system to verify Aadhar cards by detecting and extracting details using YOLOv8 for improved identification accuracy.
- Implemented OCR (Tesseract) for text extraction and applied the Verhoeff algorithm for Aadhar validation, enhancing verification efficiency and reducing false detections.
- Tech Stack: Python, Flask, YOLOV8, OCR(Tesseract), Image Processing.

Healthcare Management System | GitHub Code

- Developed a web application to manage hospital data including patients, doctors, and appointments with real-time dashboard insights using Express.js (backend) and React.js (frontend).
- Enhanced data handling efficiency and system scalability for hospital administration through optimized SQL queries and structured database design.
- Tech Stack: React.js, Node.js, Express.js, MySQL, REST API, JavaScript, HTML/CSS.

Article Analyzer | GitHub Code

Developed an article analysis platform combining Flask-based NLP processing with a Chrome Extension to classify news
content as factual or opinion-based and detect political leaning in real time

- Enhanced accuracy and accessibility of media bias detection through efficient backend integration and keyword-based NLP techniques.
- Tech Stack: Python, Flask, NLTK, HTML, JavaScript, Chrome Extension (Manifest v3), REST API, Flask-CORS.

Leadership / Position ____

IEEE CS Chapter BMSIT&M

Vicechair Jan 2025 - present

 Have been actively heading and managing the activities by IEEE Computer Society (CS) Chapter of BMSIT&M.