

SANJYOT SATISH AMRITKAR

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EDUCATION

Stony Brook University , Stony Brook, NY Master of Science in Data Science	Aug 2024 – May 2026 GPA : 3.6/4.0
MKSSS's Cummins College of Engineering , Pune, India Bachelor of Technology in Computer Engineering	Aug 2019 – May 2023 GPA : 3.5/4.0

Coursework: Data Analysis, Data Management, Big Data System, Probability, Statistical Learning, Natural Language Processing, Statistical Computing, Data Visualization.

MKSSS's Cummins College of Engineering, Pune, India

Bachelor of Technology in Computer Engineering

Coursework: Data Structures, Artificial Intelligence, Machine Learning, Data Mining and Warehousing, Database Management Systems, Deep Learning, Statistics, Internet of Things, Mathematics.

SKILLS

Languages/Frameworks: Java, Python, Node.js, React.js, SQL, MongoDB, JavaScript, HTML/CSS

Tools: Jenkins, Git, VS Code, Jupyter, PowerBI, Tableau, WEKA, Jira, Openshift.

Databases: MySQL, PostgreSQL, MongoDB, Oracle, MongoDB, Firebase, AWS, H2

Data Science: Pandas, Numpy, Scikit-learn, Keras, Seaborn, TensorFlow, Flask, Matplotlib, Plotly, Data engineering, Data analytics, Tableau, Docker, Kubernetes, D3.js, ETL, Retrieval Augmented Generation, LLM.

PROFESSIONAL EXPERIENCE

Barclays: Software Developer	Jul 2023 – Jul 2024
• Engineered and optimized REST APIs using Java, Spring Boot, and Gradle , integrating AWS (S3, Glue, DynamoDB) for scalable cloud solutions.	
• Developed and automated a React/Spring Boot logging utility, improving API log analysis speed and accuracy by 90% .	
• Strengthened CI/CD pipelines by incorporating SonarQube, Prisma, and JUnit testing for continuous quality.	
Barclays: Software Developer Intern	Jun 2022 – Jul 2022
• Designed and implemented a full-stack dashboard using Java and React for vulnerability analysis.	
• Aggregated Veracode, Pentest, and Apaas reports; used D3.js, Tableau for interactive visualization.	

PROJECTS

Adult Census Income Prediction using Machine Learning	Apr 2025
• Built a supervised ML pipeline on UCI Census data using Random Forest, achieving 92.75% accuracy and 97.6% recall for high-income class prediction.	
• Applied AIC-based feature selection , class balancing (RandomOverSampler), and evaluated models using AUC, ROC, and cross-validation.	
• Extracted key income trends via EDA using Pandas and Seaborn to support model interpretability.	
E-commerce Product Chatbot using LLM and Retrieval Augmented Generation	Jan 2025 – Mar 2025
• Developed an AI chatbot that answers customer queries about e-commerce products by leveraging real Amazon product reviews and descriptions.	
• Implemented a Retrieval-Augmented Generation (RAG) pipeline using FAISS for vector similarity search and LLM for natural language generation.	
• Developed FastAPI backend for data preprocessing, embeddings, and APIs; built a React frontend for chat interface.	
Fraud Detection using IBM's Differential Privacy Library	Sep 2022 – May 2023
• Explored IBM's open source differential privacy library, ' diffprivlib ', to gain insights into privacy-preserving techniques.	
• Trained machine learning models for credit card fraud detection, achieving 95% accuracy .	
• Contributed Isolation Forest algorithm to IBM's ' diffprivlib ', enhancing anomaly detection.	
Automatic License Plate Detection System	Apr 2022 – May 2022
• Built a computer vision model using YOLOv5, OpenCV, and Python to accurately extract license plate numbers from images with 90% precision .	
• Implemented real-time vehicle tracking by storing detected data in a centralized database using Pyrebase .	

ACHIEVEMENTS / EXTRACURRICULARS

- President: Indian Graduate Student Association(IGSA), Stony Brook University.
- Python tutor: CSTEP program at Stony Brook University
- Seminar: Shortlisted among the top 15 seminars out of 230 and published under the CSI branch at CCOEW
- Mentored 10 aspiring female engineers at the Society of Women Engineers mentorship program.
- Led the Content-Editorial-Marketing team of 50 members at TEDx CCOEW.
- Women's Representative at Rotaract Club of Zenith, Pune.