

EDUCATION

Carnegie Mellon University Master of Science in Data Analytics for Science QPA: 4.11/4.33 <i>Relevant Coursework: Statistical Modelling, Large Scale Computing, Data Analytics for Decision Making</i>	Pittsburgh, PA May 2025
Vellore Institute of Technology Bachelor of Technology in Computer Science and Engineering CGPA: 8.88/10	Vellore, India July 2024

SKILLS

Languages: Python, R, SQL, HTML, CSS, JavaScript
Libraries: Pandas, NumPy, Matplotlib, Scikit-learn, TensorFlow, PyTorch, Keras, OpenAI
Tools / Platforms: PySpark, Streamlit, Flask, Tableau, MPI, Bridges-2
Technologies: Machine Learning, Time Series, Deep Learning, Artificial Intelligence, Prompt Engineering
Certifications: Amazon Web Services Cloud Practitioner by AWS, Extern in Applied Data Science Powered by Google Developers

WORK EXPERIENCE

PNC Bank <i>Data Engineer</i> - Designed a complex SQL query to support a new interface for processing Canadian trading accounts and their beneficial owners. - Reduced API response time from 30s to under 5s for a key internal trading application by modifying query structure and logic.	Pittsburgh, PA May 2025 - Present
UBS <i>Financial Analyst Intern</i> - Automated the Month-to-Date workflow using PySpark and Databricks, saving 35 hours per month. - Programmed and executed test cases for Trader-Pack Automation using Python, enabling its deployment in production. - Deployed legacy dataset updates using Azure Cloud and implemented Git CI/CD pipelines to streamline the process. - Developed a strong understanding of trade settlement and controllers' trade closing workflows while supporting PnL reporting.	Hyderabad, India April 2024 - July 2024
Perficient, Inc. <i>Intern Consulting</i> Led UI/UX design projects, using MERN stack to enhance user experience, functionality, and overall design for client satisfaction.	Chennai, India June 2022 - Aug 2022

PROJECTS

Optimizing Reddit's BigQuery Environment using Predictive Modelling (Capstone Project) - Built predictive models to identify dead-end queries in Reddit's BigQuery Environment, optimizing infrastructure for 100M+ queries. - Enhanced query workload efficiency on Google Cloud, reducing computational overhead by 20% and improving system performance. - Developed job performance forecasts to identify high-risk roles, enabling proactive resource allocation for accelerated performance.	Jan 2025 - Present
Simulating Patient Reactions to Drugs and Placebo for Rare Disease Clinical Trials (Harvard Rare Disease Hackathon) - Developed an AI model using GANs to simulate patient responses and predict clinical trial outcomes for rare diseases with limited cases. - Fine-tuned the model to mimic realistic patient outcomes, addressing the issue of scarce active cases. - Generated synthetic control groups to replace placebo recipients, allowing all patients to receive the drug while maintaining trial integrity. - Built a clinical trial matching algorithm for doctors to input inclusion criteria and identify eligible patients through a match score. - Achieved an R² score of 0.96, demonstrating near-perfect accuracy in predicting patient outcomes.	Feb 2025
Recipe Recommender and Nutrition Estimator (Personal Project) Deployed a recipe recommender system using Word2Vec for ingredient similarity and GANs to generate novel recipes. Enabled users to discover recipes based on available ingredients, generate nutrition labels, and get suggestions on dietary alternatives.	Feb 2025
Malaria Infected Cell Classification using CNNs (Kaggle Competition) - Designed a deep learning model using convolutional neural networks (CNNs) and residual networks to predict whether a cell is parasitized by the genus Plasmodium in a dataset of over 27,000 cell images, achieving an F1 score of 0.97 for binary classification. - Ranked 4 on the leaderboard among over 150 total submissions.	Feb 2025
Forecasting Ralph Lauren Stocks (Class Project) Developed an ETS (Error, Trend, Seasonality) model to forecast Ralph Lauren stock prices based on key economic indicators.	Jan 2025
Amazon Review Classification with GPT and Llama (Class Project) - Implemented a review classification system leveraging OpenAI's GPT API and Llama to assign sentiment-based tags. - Optimized few-shot prompting, enhancing model performance to achieve an F1 score of 0.82.	Jan 2025
Credit Card Fraud Detection Model (Personal Project) - Engineered a Credit Card Fraud Detection system using Keras and SMOTE, achieving 99.99% accuracy. - Processed and analyzed 284,807 transactions, mitigating imbalanced class distribution.	Nov 2024
Flight Delay Prediction using Weather Data (Externship Project) - Built an interactive interface using Flask to predict flight delays based on user input parameters. - Extracted insights from weather patterns and flight logs, improving prediction accuracy to 92.2%.	Jul 2023