Naman Lalit

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EDUCATION

New York University, Courant, New York   **September 2023 - May 2025**
Master of Science, Computer Science   *GPA: 3.95 / 4.0*
Teaching and Grading Assistant - Operating Systems

National Institute of Technology Hamirpur, India   **July 2017 - June 2021**
Bachelor of Engineering, Computer Science   *GPA: 4.0 / 4.0*

EXPERIENCE

NYU Secure Systems Lab: Research Assistant, New York   **May 2024 - Present**
- Developed core functionalities of an operating system (RustPosix) in Rust, maintaining 100% code coverage, which improved system reliability and performance.
- Built **CI/CD** pipelines using **GitHub Actions** and **Docker**, reducing deployment time and increasing development efficiency.

Salesforce: Software Engineer, Bangalore, India   **February 2022 - August 2023**
- Pioneered the development of the **Benefits Management Portal** using Salesforce tech stack, JavaScript, React.js, and Java, generating over **$20 million** in ACV.
- Collaborated with cross-functional teams to deliver automated **PDF** uploads on the **Salesforce** platform using **Java, Spring, and Junit**, increasing efficiency for over **100** developers.
- Enhanced customer productivity by **90%** by **fine-tuning** and integrating the **Einstein GPT** bot into the public sector cloud service.

InfoEdge: Software Engineer, New Delhi, India   **July 2021 - February 2022**
- Led the back-end development of Report's product, used across the organization by more than **80+ members**.
- Boosted revenue by **50%** by engineering and launching interactive dashboards and enhanced features using HTML, CSS, Node.js, React.js, Flask, Python, and MySQL.
- Automated the processing of over **5000** daily **AWS SQS** events using a Python script, storing data in a **MongoDB** database.

CRED: Backend Engineer Intern, Bangalore, India   **January 2021 - July 2021**
- Reduced Redis memory usage by **50%** by implementing a Python script to delete unused game tickets.
- Streamlined and managed the migration of **10 REST APIs** from one service to another while overseeing the entire **end-to-end deployment** process using **Java/Spring.**

PROJECTS

Ticker Teller - Stock Price Prediction using time series forecasting and sentiment analysis
- Built an ensemble **machine learning** model to predict the stock price of **20 companies** based on the output of **LSTM** and **sentiments** of the news articles from the Wall Street Journal.
- Leveraged **OpenAI ChatGPT-3.5, LangChain, and Prompt Engineering** to generate news article sentiments, evidence extraction, and LLM explanations of more than **4000+** news articles.
- Developed a Python script to retrieve and store the companies' stock prices for 2 years using Yahoo Finance's **Vantage API**.

Stock.ai - Retrieval Augmented Generation system
- Engineered a **RAG** system tailored for academic research, leveraging a dataset of **1,000** stock prediction articles with technologies including **Large Language Models (LLM), Prompt Engineering, and Docker**.
- Deployed a **Flask** application on **Google Kubernetes Engine** to process user queries, returning the top three related articles, their publication links, and summaries, powered by **ChromaDB**'s vector embeddings.

Topic Modeling - Research Articles
- Employed **K-Means** clustering to organize **200+** research papers into thematic groups utilizing advanced **NLP** methods and embeddings, enhancing understanding through **Prompt Engineering** and **OpenAI API**.

Rust and OpenMP - Qualitative Analysis of Multi-threaded languages
- Performed Qualitative Analysis of **OpenMP (C++) and Rust** using NVIDIA V100 GPU on 4 benchmark programs, analyzing performance across 5 metrics, including **scalability, programmability, and speedup.**

RESEARCH PUBLICATION

Qualitative Analysis of Text Summarization Techniques
- Co-authored a research paper published in the reputed Hindawi Journal which performs qualitative analysis of 5 different text summarization techniques using **Python** and **Machine Learning** with over **4000+ views** and around **2500+ downloads**.

TECHNICAL SKILLS

Languages: C, C++, Java, Python, Javascript, OpenMP, Rust
Databases: SQL, MongoDB, AWS DynamoDB, Google Big Query
Frameworks: HTML, CSS, Salesforce Omnistudio, LWC, Nodejs, Flask, Spring, React, Express, Taipy, REST API, LangChain
Developer Tools: Amazon Web Services (AWS), Google Cloud Platform (GCP), Git, Redis, Junit, Docker, Kubernetes
Libraries/Other: Generative AI, LLM, GPT, Tensorflow, Pytorch, Sckit-learn, Keras, Matplotlib, Numpy, Pandas, Linux
Coursework: Multicore Processors, Database Systems, Artificial Intelligence, Machine Learning, Operating Systems, Algorithms