ANEESH ATKURI

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EDUCATION

Carnegie Mellon University — **Pittsburgh, PA**
Master of Science in Computer Engineering — December 2024
Coursework: Introduction to Machine Learning, Machine Learning for Signal Processing, Introduction to GPU Programming, Visual Learning & Recognition, Multimodal Machine Learning, Product Management Essentials, Business Marketing & Strategy

Jawaharlal Nehru Technological University — **Hyderabad, India**
Bachelor of Technology in Computer Science — May 2021

WORK EXPERIENCE

Juniper Networks — **Sunnyvale, CA**
Product Manager Intern — May 2024 - August 2024

- Led product Marvis VNA (Virtual Network Assistant) for a team of five engineers, driving networking recommendations and insights with an average of 2M monthly impressions. Spearheaded optimization of Juniper's LLM stack, enhancing model performance and delivering measurable improvements in user experience and product efficiency.
- Served as a cross-functional hub between data science, machine learning, and frontend teams to launch a new Text-to-ElasticSearch model, delivering a high-impact product utilized and contributing $73 million in annual revenue.
- Led scrum ceremonies with agile principles, improving team efficiency and increasing transparency for partners and stakeholders.
- Drove 0-to-1 strategic initiatives and cross-functional teams and led several high-visibility initiatives from concept to execution. Developed Product Requirement Documents (PRD's) and maintained detailed project plans in JIRA and Confluence.

Tata Consultancy Services — **Hyderabad, India**
Product Analyst — September 2021 - July 2023

- Implemented NumPy, and Pandas, using Python-based solutions for the Insurance client, driving significant impact across diverse regions. Deployed Python scripts for data processing, analytics, and informed decision-making.
- Created automation with Python on Anaconda to automate inactive user metrics that have been inactive in the health insurance portal for more than 730 days. Reduced build time by 68 minutes to 4 minutes with an accuracy of 97.28%.
- Good to work on all SDLC phases. Managed to work in all testing scenarios efficiently for debugging. Worked on ETL (Extract, Transform, and Load) operations. Won top organizational awards - Knowledge Pro and Best Perform
- Developed 40 KPIs relevant to small businesses by analyzing complex POS data to help users in decision making.
- Delivered 35 customer-facing demos to gather feedback and designed statistical tests to improve product usability.

Tata Consultancy Services — **Hyderabad, India**
Product Analyst Intern — May 2021 - August 2021

- Developed the TCS UA (Ultimatix Assistant) app team and integrated Microsoft Power Apps solutions to streamline business processes. Worked collaboratively with team members to identify and resolve technical issues.
- Designed and implemented custom workflows to automate tasks. Documented and maintained software requirements, design, and code. Debugged code and found the root cause of severe issues. Participated in Bug Review Meetings.

ACADEMIC PROJECTS

uSLQ - unStructured Language Querying | CMU | APP — **Spring 2024**

- Built an end-to-end Text-to-SQL database management app using LLM with RAG and Langchain. Deployed by MLFlow and leveraged API endpoints for Inference.
- Optimized the LangChain framework for efficient query parsing and execution, resulting in a 30% reduction in query processing time.

Large Language Model Rescored Automatic Speech Recognition | CMU — **Fall 2023**

- Integrating scores of pre-trained Large Language Models with branch former-based end-to-end Automatic Speech Recognition (ASR) model during decoding to improve ASR predictions. We used BERT and GPT2 models.
- Collaborated with a group of 3 where input is an audio, then using ASR we get n-best hypothesis. We pass the hypothesis to the LLM and LLM gives its own score. We got the new ranking of hypothesis and calculated WER and CER.

Blind Source Separation | CMU — **Fall 2023**

- Developed a blind source separation algorithm for Motor Unit Decomposition in HD Electromyography time series data.
- Engineered a robust peak detection algorithm for spike identification in HD EMG recordings. Implemented Clustering algorithms such as PCA, ICA and NMF to determine the optimal number of sources in a HD EMG time series data.

Global Warming Analysis and Weather Prediction using Data Science | JNTU | IEEE Publication — **Fall 2020**

- Leveraged complex climate data from diverse sources, to analyze and interpret global temperature trends since 1750. Utilized advanced data cleaning and preparation techniques to ensure accuracy and reliability analysis.
- Demonstrated exceptional accuracy with a noteworthy 91.17% predictive precision in temperature modeling.

SKILLS

Languages: Python, SQL
Tools: Figma, Docker, GitHub, GitLab, Jira, Confluence, Linux, VBA, Google Sheets, Google Slides, Windows, Microsoft Excel, Microsoft Powerpoint