ADITYA MAHAMUNI
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PROFESSIONAL SUMMARY

Dynamic Software Developer with 4 years of experience specializing in Python. Demonstrated expertise in Software Engineering, Machine Learning, Data Analytics, NLP, and Data Mining, backed by MSc in Computer Science from the University of Warwick. Notable success in driving efficiency and reliability in software projects at Nvidia Corporation.

TECHNICAL SKILLS

Programming Languages: Python, C++, SQL
Technical Skills: Machine Learning, Optimization, LLM, NLP, Prompt Engineering, NumPy, Pandas, PyTorch, Tensorflow, Transformers, LangChain
Tools and Technologies: Linux, Docker, Jenkins, CI/CD, Django, Gitlab CI, Git, JIRA, Kibana, Grafana, Agile (Scrum)

EXPERIENCE

Nvidia Corporation, Pune, India - *Software Developer* **July 2019 – Aug 2023**

- Designed a scalable Python framework for AV simulation, authoring 1000+ training simulation scenarios.
- Optimized CI/CD pipeline using Python, Gitlab CI, and Docker, enhancing deployment efficiency by 50% and reducing scenario update times by 40%.
- Created automated testing frameworks with Jenkins and Python, reducing manual testing efforts by 60% and decreasing testing cycles from 3-4 days to 1 day.
- Developed ML tools and CI/CD pipelines using NLP and PyTorch/TensorFlow, accelerating development.
- Built a diagnostic tool with Python and Linux, reducing platform-specific issues by 60% and improving reliability.
- Implemented over 200+ unit tests in C++ and Python for critical system modules such as localization and radar engine for AV *(Autonomous Vehicles)*, enhancing software reliability and monitoring.
- Coordinated technical projects with cross-functional teams, ensuring timely delivery and adherence to requirements.

EDUCATION

University of Warwick, Coventry, UK – Sept 23 – Sept 24
MSc Computer Science
Relevant Modules: Data Mining, Natural Language Processing, Foundations of Data Analytics, High Performance Computing

Government College of Engineering, Aurangabad, India – July 2015-May 2019
Bachelor of Engineering, Information Technology (CGPA: 7.448/10.0)
Relevant Modules: Data Structures, Object Oriented Programming, Operating System and Design

PROJECTS

Event Extraction from Financial Articles Using Natural Language Processing (MSc Dissertation) - Link
Developed and implemented NLP techniques for event extraction from financial articles, leveraging zero-shot and few-shot learning using generative capabilities of different LLM models, along with fine-tuning of Large Language Models (LLMs) for accurately identifying and classifying the financial events.

A Clustering and Regression Analysis of Financial Health and Stock Performance – Link
Enhanced risk assessment and decision-making for financial analysis by developing a Python-based financial analysis with 99% accuracy and RSME of 1.118, utilizing clustering analysis for market insights and resilience analysis of major companies.

Prediction of Protein Expression – Link
Built prediction model utilising image analysis to predict protein expression levels in various biological tissues. Achieved feature extraction using PCA, GLCM, and Transfer Learning and OLS and SVR for regression analysis. Obtained RMSE score of 0.677 using a CNN architecture for predicting protein expression levels.

Sentiment Classifier for Twitter Data – Link

CERTIFICATIONS

Neural Networks and Deep Learning by DeepLearning.AI – Sept 2020