ANANTHA KRISHNA CHILAPPAGARI

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EXPERIENCE

SOFTWARE ENGINEER   **Aug '22 - Dec '22**
Constella Intelligence Private Limited,   **Hyderabad**

● Streamlined data pipeline migration from Airflow to AWS Stepfunctions, triggered by Lambda function on file upload, cutting down processing time by 40% for rapid insights
● Implemented automatic scaling for the ECS load balancer, effectively handling large files and reducing resource idle time by 20%.
● Utilized Python and PySpark in EMR processing, enhancing data processing and decreasing processing costs by 15%
● Improved system resilience with automated alerts for EMR and ECS clusters, reducing operational overhead by 25%.
● Achieved seamless state management of breach files through ECS updates, ensuring accurate tracking and reducing manual intervention by 50%

SOFTWARE ENGINEER INTERN   **Jan '22-Aug '22**
Constella Intelligence Private Limited,   **Hyderabad**

● Made substantial contributions to machine learning projects and achieved 93% accuracy in classifying malicious emails.
● Elevated real-time threat assessment through a Flask REST API, interfacing with trained ML models for harm ratings on a 0–1 scale, guided by predefined rules
● Exercised diverse clustering techniques on dark web breached data, yielding actionable insights on cybersecurity risks and finding their impact and level

PROJECTS

DOMAIN-SPECIFIC LLM ON FINANCIAL DATA

● Built a domain-specific LLM by hyper-tuning an OpenAI model using financial dataset, enhancing model performance.
● Collected and preprocessed financial data by scraping news articles to train the model, utilizing MMR and re-ranking algorithms, resulting in a 10% increase in accuracy.
● Leveraged Pinecone database and density-based approaches to improve output relevance while implementing LangChain for sequential Q&A to support follow-up inquiries.

PREDICTING SALARIES AND TRENDS IN DATA SCIENCE

● Analyzed data science salary trends across various roles, locations, and experience levels to identify significant patterns and insights.
● Evaluated salary variations based on location, experience, role, and currency, providing a comprehensive overview of compensation disparities and offering strategic guidance for career planning and specialization.

PLAYER PERFORMANCE PREDICTION

● Developed a predictive model to forecast player performance against specific opposition and on particular grounds, enhancing strategic decision-making
● Analyzed player matchups, providing detailed insights into batsman vs. bowler performance to inform game strategies and player selection.

IMAGE CAPTIONING

● Implemented a combined Convolutional Neural Network and Long-Short-Term Memory model to generate accurate image captions, enhancing automated image understanding.
● Improved captioning accuracy and coherence significantly by integrating CNN-LSTM architecture compared to traditional methods.

EDUCATION

Master of Science (MS), Data Science,   **Aug 23–Present**
University Of North Texas,   **Denton, Texas**
Bachelor of Technology (B.Tech.), Computer Science,   **Aug '18–July 22**
Keshav Memorial Institute of Technology,   **Hyderabad, India**

SKILLS

Python | Data Science | Data Analysis | Statistics | Large Language Models | Machine Learning (ML) | Natural Language Processing (NLP) | Scikit-learn Deep Learning (DL) | Amazon Web Services (AWS) | TensorFlow | Keras Numpy | Pandas | Matplotlib | Problem Solving | MySQL | Linux | Git | Flask | Data Exploration | Prompting