# RANGAPURAM DEEKSHITH SAGAR

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#### **SUMMARY**

Senior Software Engineer with expertise in designing technical and strategic solutions, specializing in cloud platforms like AWS, Azure, and GCP. Experienced in software development, building scalable microservices and API architectures, with a strong focus on performance optimization and risk management. Proficient in NoSQL databases, including Cassandra, and Kafka for real-time data streaming in finance and other domains. Demonstrated leadership in agile methodologies, driving innovation, infrastructure optimization, and supporting object-oriented design for complex systems.

#### **EDUCATION**

University at Buffalo, New York

(Master of Science in Computer Science- AI/ML)

Institute of Aeronautical Engineering (affiliated to JNTU, Hyderabad)

(Bachelor of Technology in Computer Science and Engineering)

Aug. 2023-Dec. 2024 (expected) CGPA: 3.8/4(till now) Aug. 2016 - May. 2020 CGPA: 8.68/10

# **TECHNICAL SKILLS**

- Programming Languages: Python, R, Java, C/C++, SQL, Bash, MySQL, NoSQL, Shell Scripting
- Machine Learning & AI: Scikit-learn, TensorFlow, PyTorch, Keras, OpenCV, NLTK, Hugging Face, Transformers, LSTMs, CNNs, RNNs, XGBoost, LightGBM, Gradient Boosting, Reinforcement Learning.
- Data Science & Analytics: Pandas, NumPy, Matplotlib, Seaborn, Plotly, Data Wrangling, Data Visualization, EDA.
- NLP & Text Processing: spaCy, BERT, GPT, T5, Word2Vec, Sentence Transformers, Codellama, CodeQl, TextBlob.
- Developer Tools: Git, Docker, Kubernetes, Jenkins, JIRA, VSCode, Anaconda, AWS SageMaker, Apache Airflow, MLflow
- Cloud Platforms: AWS (EC2, S3, Redshift, Lambda), GCP, Azure, MuleSoft, Salesforce, Firebase, Heroku.

#### PROFESSIONAL EXPERIENCE

#### Research Assistant (GenAI Lab), University at Buffalo

Aug. 2024 - Present

- Developing an LLM (Graph CodeBert) based model trained on CWE Dataset to enhance ability to identify complex security
  vulnerabilities and deliver recommended code fixes to Enterprise Applications detection and remediation accuracy by 30%.
- Enhanced security analysis by integrating **Transformers** into the 'Sven' security tool, boosting **vulnerability assessments**.

## Software Developer (Intern), The Integrity Company, California

May. 2024 – Aug. 2024

Designed and developed an AI chatbot and a React and Django website to manage and place jobs for customers.

#### Research Assistant (AI Security Lab), University at Buffalo

Feb. 2024 - Apr.2024

- Pioneered the integration of Transformers to enhance **Sven's** ability to identify complex security vulnerabilities.
- Utilized **LLMs** to boost Sven's analytical capabilities by 20%, ensuring security in vulnerability assessments.

### Senior Lead Engineer / Software Engineer, NTT Data (Apisero Inc), India

Aug. 2020 – Aug. 2023

- Engineered a MuleSoft Datadog connector for Indeed job portal, boosting efficiency by 50%, saving \$300K/yr.
- Led modernization of 30% of legacy APIs to Salesforce UI, enhancing integrations and testing across Workday.
- Automated deployment processes by implementing CI/CD pipelines for apps using Gitlab and Azure.
- Streamlined cloud-based integrations using **MuleSoft** at **Hallmark Inc**, elevating **Salesforce-MSSQL** synchronization efficiency by **80%** and saving **\$100K/yr**.
- Refined **Dataweave** and **Python** scripts, reducing production errors by 20% and strengthening security protocols.

# **ACADEMIC PROJECTS**

#### **Deep Fake Detection System** | PyTorch, ResNet, Ensemble Models

Mar. 2024

• Designed and continually enhanced a model to detect **manipulated media**, supporting **integrity** in digital content.

#### Autoencoder for Anomaly Detection | Python, Autoencoders

Jan. 2024

Automated defect detection in manufacturing, reducing manual inspection and improving detection efficiency by 30%.
 Time-Series Forecasting with RNNs | Python, RNN, LSTM

Nov. 2023

• Developed models to predict energy usage patterns, aiding utility companies in resource and grid optimization.

# Sentiment Analysis Using LSTM | Python, LSTM, NLP

Oct. 2023

• Analyzed customer **sentiment** from social media data, achieving over **90% accuracy** to improve marketing strategies.

#### ACHIEVEMENTS AND CERTIFICATIONS

- Earned 3X MuleSoft certified (MCIA, Developer, MCPA) focused on microservices and integrations.
- Smart India Hackathon: Directed a team to build an ML web App with Prophet for forecasting cotton prices.