

LEELA SRIJA ALLA

+1 (716) 705-1957 · aleelasrija@gmail.com · [LinkedIn](#) · [Portfolio](#) · [GitHub](#)

EDUCATION

University at Buffalo, SUNY

2023 - 2024

Masters in Computer Science (AI/ML track), CGPA: 3.8/4.0

- **Relevant Coursework:** Operating Systems, Computer Security, Analysis of Algorithms, Machine Learning, Deep Learning, Natural Language Processing, Data Models and Query Languages, Data Intensive Computing, Computer Vision

University of Hyderabad, India

2017 - 2022

Integrated Masters in Technology, Computer Science, CGPA: 3.4/4.0

- **Publication:** Opinion Maximization in Signed Social Networks Using Centrality Measures and Clustering Techniques
- **Honor:** Best Student Paper at 19th International Conference on Distributed Computing and Intelligent Technology 2023

SKILLS & OTHER

Languages: C, C++, Java, Python, JavaScript, ReactJS, Node.js, PHP, HTML, CSS, Ruby on Rails, Shell Scripting

Frameworks: TensorFlow, Data Mining, Flask, Scikit-learn, NetworkX, OpenCV, Keras, PyTorch, Hadoop, Langchain

Database Management: MySQL, MongoDB, PostgreSQL, Pinecone

Technologies/Environments: Unix/Linux, Windows, CI/CD, Docker, Azure, Agile, Kubernetes, Git, Latex, Tableau, Microsoft Suite

PROFESSIONAL EXPERIENCE

One Convergence Devices Pvt Ltd, Hyderabad

Aug 2022 - Apr 2023

Software Engineer

- Enhanced DKube UI using React, reducing model deployment time by 9%, improving user interaction and efficiency.
- Optimized backend with Node.js and Express, improving API response times by 20%, and increasing server performance.
- Implemented CI/CD with Jenkins, automating Docker image creation and zero-downtime deployments on Kubernetes.
- Integrated Prometheus and Grafana for monitoring, enhancing early issue detection and system performance reliability.
- Created microservices architecture with Docker and Kubernetes, ensuring scalable and resilient deployment across clusters.

Jindal Trading Co., Delhi

Oct 2020 - Dec 2020

Full Stack Web Developer (Intern)

- Headed e-commerce platform overhaul using React, Node.js, and MongoDB, boosting daily traffic by 21% and sales by 15%.
- Incorporating unit testing with Jest and end-to-end testing with Cypress, enhancing code quality and reducing bugs.
- Established CI/CD pipelines with Jenkins and Docker, boosting development efficiency and ensuring seamless integration.
- Led a team of 4 developers, managing milestones and delegating tasks to ensure project success and business growth.

University of Hyderabad, Telangana

Sep 2021 - May 2022

Research Assistant

- Collaborated with Dr. Anjeneya Swami on scalable software for opinion maximization in social networks, handling datasets.
- Designed the Linear Threshold Model using Python and NetworkX, optimizing seed selection algorithms by 20%.
- Developed software tools for Graph Theory course, enhancing visualization of network structures and student engagement.
- Improved diffusion models with centrality measures, boosting efficiency on synthetic datasets using heuristic algorithms.

PROJECTS

Textual Entailment in Clinical Trial Data (PyTorch, NLP, Hugging Face)

Mar 2024 - May 2024

- Achieved an F1 Score of 72.34 by building a multi-evidence NLI model with Clinical Trial Reports for breast cancer treatments.
- Improved numerical reasoning by fine-tuning DeBERTa-v3, applying Sebis Pipeline Model with BioBERT experimentation.

Elective Genie (Python, Langchain, Hugging face, Pinecone, Streamlit)

Feb 2024 - Mar 2024

- Engineered RAG AI for academic planning, using LangChain and Pinecone for vector database creation and retrieval.
- Optimized curriculum data indexing with Hugging Face's Llama-2-7b-chat-hf, improving academic query responses.

Coloring Black & White Images (PyTorch, GAN)

Dec 2023 - Feb 2024

- Constructed a conditional GAN with ResNet for color prediction using COCO dataset images, enhancing colorization.
- Achieved an 11% accuracy improvement in image segmentation by applying supervised training with U-Net as a generator.

Crime Analysis in Los Angeles (Scikit-learn, Pandas, Flask, ReactJS)

Sep 2023 - Dec 2023

- Performed EDA on LA Crime Dataset, optimizing logistic regression, Random Forest, KNN, and K-means models for crime classification and hotspot identification; deployed React.js website with Flask APIs on AWS EC2 to ensure robust user access.

Pen Ink Differentiation for Handwritten Document Forensics (OpenCV, Keras, TensorFlow, CNNs)

Jan 2021 - May 2021

- Designed a CNN model to detect different pen inks in handwritten documents with 94% accuracy in fraudulence detection
- Increased model accuracy by optimizing image processing techniques, ensuring consistent forensic analysis results.

Vehicle Collision Detection and Alcohol Detection System (Arduino, IoT sensors)

Jun 2019 - Jul 2019

- Crafted IoT prototype integrating various solutions to predict vehicle collisions achieving 61% accuracy in predictions.
- Constructed sensor system for alcohol consumption detection with 89% accuracy leveraging Internet of Things technology.