Dheeraj Gajula

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Education

University of Colorado – Boulder Boulder, CO
Master's in Computer Science *Aug 2025 – May 2027*
Coursework : Enterprise Networks, Network Systems, Machine Learning

Dayanada Sagar College of Engineering Bangalore, India
Batchelor's in Computer Science and Engineering | 3.76/4.0 *Nov 2020 – May 2024*
Coursework : Data structures and algorithms, Database systems, Operating systems, Computer Networks, Cloud Computing, Automata Theory, Software Engineering, Machine Learning, Deep Learning, NLP, Computer Vision

Experience

Software Engineer – 1 June 2024 – Aug 2025
Versa Networks *Bangalore, India*
- Developed REST APIs in **GoLang** and **Cassandra** that is serving more than 3000 reqs/s reported metrics through **Prometheus** and built dashboards through **Graphana**
- Performed **Quantitative and Qualitative analysis** of virus total malicious feed data by building multiple data pipelines using **Python** and **BigQuery** and built a **Mathematical Reinfocement model** to predict the result
- Containerised multiple services using **Docker** and **Kubernetes** and deployed them in **GCP**

Software Engineer – Intern Feb 2024 – June 2024
Versa Networks *Bangalore, India*
- Automated the device usage tracking at versa networks, reduced the time of billing from 7 days to under an hour
- Analyzed inconsistent logs, built systems to **detect anomalies**, and **StateMachines** to track device states
- Used **MongoDB and Python Data modelling** to process hierarchical data of the director logs and provided insights about the usage on **prometheus and Grafana**
- Used **Flask** and **FastAPI** for making it as a service, **Docker** and **Docker compose** for deploying it on servers

Machine Learning Research Intern Jan 2024 – March 2024
App synergies — Mingle wise *Remote*
- Worked on an app named Minglewise and reduced fake profiles on the platform by 35% by **ensemble** of 3 models
- Used **Regex + NER** to detect Bio issues for a profile, used **HuggingFace** model to detect cartoon profile pictures
- Fine Tuned **ResNet** for detecting Gender mismatch, used **DeepFace** to detect multiple people in Profile Photo
- Used **FastAPI** for making it as service, deployed it in **GCP** using **Cloud Run** by building a **Docker**

Projects

Schizo AI | *FastAPI, Explainable AI, Streamlit, Data caching, Deep Learning* Sept 2023 – Jan 2024
- Preprocessing of **EEG** data and plotting graphs and **heatmaps** for all channels using **Matplotlib** and **SeaBorn**
- Fine-tuned **ResNet** to detect Schizophrenia at early stages and used **Explainable AI (Grad-CAM)** to interpret output.
- Built efficient **Explainable AI pipeline** with StreamLit frontend for multiple predictions on 8GB RAM laptops

Green Guru | *Deep Learning, NLP, Computer Vision* Oct 2022 – May 2023
- From the Location of the farmer Clicking photo, we extract Location, weather (API), type of soil according to crops and suggest him crops for that year, built **Random Forest classifier**
- Built **Neural Networks** & **NLP** based emotional support & information chatbot for farmers regrading pesticides
- Fine Tuned **ResNet** to detect the disease of the leaf and provided pre-determined solutions based on the output

Technical Skills

Languages: GoLang, Python, C/C++, SQL (Postgres), Bash
Frameworks and Database: Flask, FastAPI, Postgres, BigQuery, Cassandra, MonogDB, Prometheus, FireBase
Developer Tools: Git, Docker, Kubernetes, Google Cloud Platform, Graphana, AWS, NGINX, Hugging Face
Libraries: pandas, NumPy, Matplotlib, TensorFLow, OpenCV, sckit-learn, Seaborn, NLTK

Achievements And Publications

Explainable AI in the context of Schiziphernia 2024
- Presented our undergrad thesis at **International Conference for advanced data driven Intelligence**
- Built the project ***Schizo AI***, explored different explainable AI models like **Lime, shap, CAM**

Smart Ind Hackathon winner 2022
- **Problem statement :** To come up with innovative solutions to save Court's time during the hearing day of a case
- Built project ***Tenali***, **Machine Learning engineer** for the team

UNESCO Ind Africa Hackathon Finalist 2023
- **Problem Statement:** optimize the energy flow, Students from 22 countries attend this hackathon
- One of the 200 students that got selected from Ind, Received a Best Contributors award for the problem statement