

SUMMARY

Highly driven Computer Science Engineer seeking opportunities to enhance my knowledge in Deep Learning and Natural Language Processing and use my adroitness as a developer to democratize AI and enable most of humanity to enjoy its fruits.

EDUCATION

- The Pennsylvania State University**
MS in CS
August-2022 – Present
- Fr. Conceicao Rodrigues College of Engineering**
BE in CE
June 2017 – June 2021
CGPA: 9.58

SKILLS

- Programming Skills** in C, JavaScript, Python, HTML & CSS, TensorFlow, Keras, RASA, Flask & ReactJS
- Cloud Experience** in AWS & Owncloud
- Database Experience** in MySQL, PostgreSQL, MongoDB & Neo4J
- Microservice Experience** in Docker
- Practical Experience** in Git, REST APIs, IoT, Deep Learning, Natural Language Processing & Image Processing
- Research Skills** in technical writing, paper presentation & problem-solving

CERTIFICATION

- AI for Everyone & Deep Learning Specialization** by deeplearning.ai
- Machine Learning A-Z: Hands-on Python & R In Data Science** by Udemy
- Machine Learning and AI using Python** workshop conducted by ATS Learning Solution in association with Microsoft

ACHIEVEMENTS

- 5th position at **India Singapore Hackathon 2019**
- 4th position at **AI Hackathon 2019**
- 1st position at **Smart India Hackathon 2019** software edition
- Joe Sportsmanship Award at “**Association for Unmanned Vehicles Systems International Student Unmanned Aerial System Competition 2019**”
- Member of college **technical team Mavericks UAS**, working in the field of **Autonomous Unmanned Aerial Vehicles** from **June 2018 to June 2019**
- Conducted workshops on “**Introduction to Arduino**” and “**Deep Learning**” with Team Mavericks UAS at FR. CRCE

EXPERIENCE

- AI Product Manager | Plexflo** **Oct 2021 – July 2022**
 - Leading strategic and special projects in AI ranging from new product/ feature development to strategy creation for critical infrastructure industries
 - Developed SaaS cloud-product ‘EVIDence’ which runs Machine Learning at the Grid Edge based on real-time data from Smart Meters and Industrial IOTs
 - Developed an AI open-source library called Plexflo for Non-Intrusive Load Monitoring (NILM) using Timeseries Segmentation models for EV detection
- Co-Founder/CTO | DataCertus** **June 2021 – Mar 2022**
 - Developed numerous Deep Neural Network and Timeseries forecasting workflows and models for the no-code platform deployed on AWS
 - Aligned organizational objectives with the company mission to increase business growth and integrate work strategies
- Technical Consultant | Emesh Farm Technik** **Jan 21 – Sept 2021**
 - Advising the company to incorporate various AI technologies in the domain of Hydroponic Farming and Fodder Machines
 - Presented business leaders with ROI estimations to drive project planning
 - Guiding in to develop of an Android application for the fodder machine
- AI Research Intern | Sync Energy Inc.** **July 2020 – Sept 2021**
 - Python-Flask-based Power Outage API deployed on AWS cloud for extracting power outages statistics depending on the Geo-Coordinates
 - Developed Python - RASA-based chatbots for the Power Outage API and Power System Simulation Software (GridLAB-D) respectively
 - Utilizing Deep Learning techniques to Identify Utility Poles with Crossarms and Estimate Their Locations from Google Street View Images
 - Published research paper on generating knowledge graphs from research papers related to wildfires, and their impacts on the electrical grid infrastructure
- SDE Intern | Mumbai International Airport Ltd.** **June 2019 – July 2019**
 - Integration of Airside Safety Management Application {AngularJS and Microsoft SQL Server database-based framework system} with Incident Monitoring System {Microsoft SQL Server database and .net framework}
 - Integrated Python Payment module with a KIOSK and a PoS Terminal
 - Python-Shell Script for Establishing a communication link between the ATS and the Flight Feed Server

PROJECTS

- Medical Analytica using Blockchain** **March 2020 – May 2021**
 - A RASA-based therapy chat-bot for emotion analysis, storing and tracking Medical Records, tracking user health and analysis of the user’s behaviour by using BigchainDB as a decentralized database to develop an end-to-end system for successful storage, transfer and tracking of patient healthcare data
- Attentiveness and Attendance Detection Problem** **July 2019 – Dec 2019**
 - An end-to-end architectural system that incorporates a human pose estimator, emotion recognition and head gaze deep learning models into a customized neural network to generate a prediction of the engagement levels for the students. Engagement levels are then plotted onto a dynamic chart to monitor the lesson across lessons and help teachers to find the optimal time to call for breaks.
- Context Classification from Audio Conversations** **April 2019 – Aug 2019**
 - A voice-based conversation between a customer and service centre to find out the context of the conversation and classify it accordingly. It uses Google’s “Speech-to-text” to convert the voice clips to text and then uses it as an input for our OpenNMT NLP (Natural Language Processing) model which then carried out the intent classification task.

PUBLICATIONS

- Vedant S., Jason D., Mayank S., Mahendra M., Dhananjay K. (2021) Leveraging Deep Learning and IoT for Monitoring COVID19 Safety Guidelines Within College Campus. In: Garg D., Wong K., Sarangapani J., Gupta S.K. (eds) Advanced Computing. IACC 2020. Communications in Computer and Information Science, vol 1367. Springer, Singapore. https://doi.org/10.1007/978-981-16-0401-0_3
- M. Mehra, Vedant Sahai, P. Chowdhury and E. Dsouza, "Home Security System using IOT and AWS Cloud Services" 2019 International Conference on Advances in Computing, Communication and Control (ICAC3), Mumbai, India, 2019, pp. 1-6, DOI: 10.1109/ICAC347590.2019.9089839
- S. Kaur, V. Sahai, A. Jaiswal and S. Chanda, "Knowledge Mining for Defining Systemic Engineering Practices," 2020 4th International Conference on Electronics, Communication and Aerospace Technology (ICECA), Coimbatore, 2020, pp. 1346-1352, DOI: 10.1109/ICECA49313.2020.9297380.