

SUMMARY

Highly driven Computer Science Engineer seeking opportunities to expedite 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 (Fr. CRCE) – BE in CS**
June-2017 – June 2021
BE CGPA: 9.58
- **Nirmala Memorial Foundation College – 12th**
Mar 2015 – Mar 2017
HSC: 82.33%
- **Thakur International School – 10th**
March 2014 – March 2015
ICSE: 92.3%

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** such as 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
- **AWS Fundamentals: Going Cloud-Native, & AWS Fundamentals: Building Serverless Applications** by Coursera

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**
- **Reviewer** for “**2021 2nd International Symposium on Automation, Information and Computing (ISAIC 2021)**”

EXPERIENCE

- AI Product Manager** / Plexflo October 2021 – Present
 - Leading strategic and special projects in AI ranging from new product/feature development to strategy creation for critical infrastructure industries.
 - Developed a production level SaaS product called EVIDence.
 - Drove operational improvements which resulted in savings and improved profit margins.
 - Led projects and analyzed data to identify opportunities for improvement.
- Co-Founder/Chief Technological Officer** | DataCertus June 2021 – March 2022
 - Developing various training and prediction AI/DL/NLP workflows and models respectively for the no-code platform over AWS
 - Aligned organizational objectives with the company mission to increase business growth and integrate work strategies.
 - Established foundational processes for business operations.
- Technical Consultant** | Emesh Farm Technik Pvt. Ltd. January 2021 – 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 – September 2021
 - Python-Flask based Power Outage API deployed on AWS cloud for extracting power outages statistics when state or county name or Lat/Long are given as inputs
 - 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
- 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 based entity 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
- COVID19 Face Mask Detection and Facial Recognition** April 2020 – Aug 2020
 - Built a real-time AI COVID framework utilizing the pre-trained Keras-OpenFace model for the facial recognition analysis and the custom MobileNetV2 transfer learning approach for the mask detection models.
- 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.

PUBLICATIONS

- 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.
- 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