

EDUCATION

- The Pennsylvania State University**
MS in CSE
August-2022 – Present

- Fr. Conceicao Rodrigues College of Engineering**
BE in CE
June 2017 – June 2021
CGPA: 9.58

EXPERIENCE

- Teaching Assistant | Pennsylvania State University** **Aug 2022 – Present**
 - Course CMPSC 131: Programming and Computation I: Responsible for creating course contents, labs, assignments, quizzes, and practice problems

- AI Product Manager | Plexflo** **Oct 2021 – July 2022**
 - 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
 - Developed Rooftop Solar Assessment API by leveraging Mask R-CNN Rooftop Segmentation and Geo-Spatial Image Processing techniques and was responsible for the SOC2 compliance of the company

- Technical Consultant | Emesh Farm Technik** **Jan 21 – Sept 2021**
 - Advised the company to incorporate various AI technologies in the domain of Hydroponic Farming and Fodder Machines

- AI Research Intern | Sync Energy Inc.** **July 2020 – Sept 2021**
 - Python-Flask-based Geo-Coordinates Power Outage API deployed on AWS cloud for extracting power outages statistics
 - Python - RASA-based chatbots for the Power Outage API and Power System Simulation Software (GridLAB-D)
 - Utilizing Deep Learning techniques to Identify Utility Poles with Crossarms and Estimate Their Locations from Google Street View Images
 - Created knowledge graphs from research papers related to wildfires, and their impacts on the Grid Infrastructure

- SDE Intern | Mumbai International Airport Ltd.** **June 2019 – July 2019**
 - Integration of Airside Safety Management Application {AngularJS and Microsoft SQL Server framework system} with Incident Monitoring System {Microsoft SQL Server database and .net system}
 - 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

- Datacertus Inc.** **June 2021 – March 2022**
 - A fully managed no-code/low-code Machine Learning and Data Science service carefully designed for everyone. Deployed over AWS, it uses our drag-and-drop Intelliface™ and Machine Learning/Deep Learning-based workflows

- Leveraging Conversational AI for Secure Healthcare Assistance** **March 2020 – May 2021**
 - An end-to-end system for the successful storage, transfer, and tracking of patient healthcare data.
 - A RASA-based therapy chatbot is provided which leverages the decentralized database for emotion analysis, storing and tracking Medical Records, tracking user health, and analysis of the user's behavior

- Intelligent Classrooms** **June 2020 – October 2021**
 - An end-to-end architectural system that incorporates human pose estimator, emotion recognition, and head gaze deep learning model into a customized neural network Intelligent Classrooms to enable a holistic understanding.

SKILLS

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

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.

ACHIEVEMENTS

- 5th Rank** at India Singapore Hackathon 2019
- 1st Rank** at Smart India Hackathon 2019- Software Edition
- 4th Rank** at India AI Hackathon 2019
- Joe Sportsmanship Award** at "AUVSI-SUAS 2019"