# **VEDANT SAHAI**

#### **OBJECTIVES**

Highly driven Computer Science Engineer seeking full-time or intern opportunities anywhere in the USA where I can expedite my knowledge in Artificial Intelligence and Software Development and use my adroitness as a developer to democratize AI for humanity to enjoy its fruits.

#### **EDUCATION**

• The Pennsylvania State University

MS in Computer Science & Engineering

August-2022 – Present

GPA: 3.78

• Fr. Conceicao Rodrigues College of Engineering BE in Computer Engineering CGPA

CGPA: 9.58

June 2017 – June 2021

#### **SKILLS**

- Programming Skills in C, JavaScript, Python, HTML/CSS, TensorFlow, PyTorch, RASA, Flask, FastAPI, & ReactJS
- Cloud Experience in AWS and Owncloud
- 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

## **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

- Created a SaaS cloud product based on real-time smart meter data and industrial IoTs, EVidence, which uses Machine Learning at the Grid Edge
- Delivered a non-invasive load monitoring (NILM) AI open-source library called Plexflo based on Time-series Segmentation models.
- Developed Rooftop Solar Assessment API using Mask R-CNN Rooftop Segmentation and Geo-Spatial Image Processing techniques, ensuring SOC2 compliance.

#### Technical Consultant | Emesh Farm Technik

Jan 21 – Sept 2021

Assisted the company in incorporating AI technologies into Hydroponic Farming and Fodder Machines

### AI Research Intern | Sync Energy Inc.

July 2020 - Sept 2021

- AWS cloud-based Python-Flask Geo-Coordinates Power Outage API for extracting power outage statistics
- Python-based chatbots for Power Outage API and GridLAB-D Power System Simulation Software
- Identified and estimated the locations of utility poles with cross-arms using Google Street View images using Deep Learning techniques.
- Generated knowledge graphs from research papers on wildfires and their effects on grid infrastructure

#### SDE Intern | Mumbai International Airport Ltd.

**June 2019 – July 2019** 

- Integration of the Airside Safety Management Application [AngularJS and Microsoft SQL Server framework system] with the Incident Monitoring System [Microsoft SQL Server database and .net system].
- Integrated Python Payment module with a KIOSK and a PoS Terminal. Python-Shell script to establish a communication link between the ATS and the Flight Feed Server

#### **PROJECTS**

## Datacertus Inc.

June 2021 – March 2022

• A full-service, low-code Machine Learning, and Data Science solution that is designed to meet the needs of every user. Our Machine Learning/Deep Learning-based workflows, deployed over AWS, use IntellifaceTM drag-and-drop interfaces.

## Leveraging Conversational AI for Secure Healthcare Assistance

March 2020 – May 2021

• An end-to-end system for storing, transferring and tracking patient healthcare data. A RASA-based therapy chatbot is provided, leveraging the decentralized database for the analysis of emotion, storing and tracking medical records, monitoring health, and analyzing behavior.

# **Intelligent Classrooms**

**June 2020 – October 2021** 

• An end-to-end architecture incorporating a method for estimating human poses, emotion recognition, and head gaze deep learning into a customized neural network Intelligent Classroom.

## **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
- 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"