VEDANT SAHAI

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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 CSE
  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, Selenium & 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

Teaching Assistant| Pennsylvania State University Aug 2022 – Present

- Course CMPSC 131: Programming and Computation I: Responsible for creating course contents, labs, assignments, quizzes, practice problems, and.

AI Product Manager | Plexflo Oct 2021 – July 2022

- Led 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
- Developed Rooftop Solar Assessment API by leveraging Mask R-CNN Rooftop Segmentation and Geo-Spatial Image Processing techniques
- 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
- Consulted in to develop of an Android App 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 creating 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

- DataCertus is 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 to forecast sales, profits, and customer demands without spending a fortune on ML
- It is a citizen data science platform that accelerates data science workflows for the world's largest problems without any code

Medical Analytica using Blockchain March 2020 – May 2021

- Bringing EHR to blockchain BigchainDB, a decentralized database to develop an end-to-end system for the successful storage, transfer, and tracking of patient healthcare data. All records are encrypted using AES-256 encryption and access to this data is transferred through blockchain and asymmetric cryptography. Due to limited blockchain data storage, files are being stored in IPFS.
- A RASA-based therapy chat-bot for emotion analysis, storing and tracking Medical Records, tracking user health, and analysis of the user's behavior by using BigchainDB as a decentralized database to develop an end-to-end system for successful storage, transfer, and tracking of patient healthcare data

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.