VEDANT SAHAI

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EDUCATION

The Pennsylvania State University | *State College, USA* — *May 2024*
Master of Science in Computer Science — Current GPA: *3.78/4.0*

Fr. Conceicao Rodrigues College of Engineer | *Mumbai, India* — *May 2021*
Bachelor of Engineering in Computer Engineering — CGPA: *9.58/10.0*

SKILLS

Languages: Python, C, Java, JavaScript, HTML/CSS & LATEX
Databases: MySQL, PostgreSQL, MongoDB & Neo4J
Frameworks: TensorFlow, PyTorch, XGBoost, NLTK, RASA, Flask, FastAPI, PyTest, Elasticsearch & Docker
Practical Experience: Docker, AWS, REST, IoT, Deep Learning, Natural Language Processing & Computer Vision

EXPERIENCE

Teaching/Learning Assistant | *Pennsylvania State University, USA* — *Aug 2022 – Present*
- TA for Courses CMPSC 131 (Programming and Computation I: Fundamentals), 132 (Programming and Computation I: Data Structures) & LA for CMPSC 431W (Database Management Systems).

AI/ML Summer Associate | *JP Morgan & Chase Co., USA* — *Jun 2023 – Aug 2023*
- Created a comprehensive PyTest-based testing framework to validate the entire Feature Engineering codebase for the Transaction Risk Modeling Team.
- Implemented an Online Machine Learning approach using the XGBoost algorithm to design a dynamic system architecture for real-time recalibration of the PoS-based Card Transaction Risk ML model upon detecting data drift.
- Developed a TabNet-based Deep Neural Network for the Transaction Risk model as a challenger.

AI Product Manager | *Plexflo, India* — *Oct 2021 – July 2022*
- Pioneered the development of EVidence, a cutting-edge SaaS cloud product that harnesses real-time smart meter data and industrial IoTs, leveraging 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.

AI Research Intern | *Sync Energy Inc., India* — *July 2020 – Sept 2021*
- Developed an AWS cloud-based Python-Flask Geo-Coordinates Power Outage API and Python-based chatbots for seamless extraction of power outage statistics and improved user interaction with the GridLAB-D Simulation Software.
- Utilized Deep Learning techniques to identify and estimate the locations of utility poles with cross-arms from Google Street View images, streamlining infrastructure assessment.

SDE Intern | *Mumbai International Airport Ltd., India* — *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].
- 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 designed to meet every user's needs.
- Our Machine Learning/Deep Learning-based workflows, deployed over AWS, use IntellifaceTM drag-and-drop interfaces to expedite the data science/model training process.

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 BigchainDB blockchain database for the analysis of emotion, storing and tracking medical records, monitoring health, and analyzing behavior.

PUBLICATIONS

- Vedant S., Jason D., Mayank S., Mahendra M., Dhananjay K. (2021) Leveraging Deep Learning and IoT for Monitoring COVID-19 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.

AWARDS

- **Fourth Runner Up** at *India Singapore Hackathon 2019*
- **Winner** at *Smart India Hackathon 2019*
- **Third Runner Up** at *India AI Hackathon 2019*