

EDUCATION

The Pennsylvania State University | State College, USA

Master of Science in Computer Science

Fr. Conceicao Rodrigues College of Engineer | Mumbai, India

Bachelor of Engineering in Computer Engineering

May 2024

Current GPA: 3.78/4.0

May 2021 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
- 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