VAASU SOHEE

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ACADEMIC QUALIFICATION

NIIT UNIVERSITY Neemrana, RJ
Bachelor of Technology in Computer Science and Engineering *August 2019 – August 2023*

- Relevant Coursework: Artificial Intelligence, Machine Learning, Natural Language Processing, Data Structures, Probability and Random Processes, Software Engineering

WORK EXPERIENCE

EY (Ernst & Young), Senior Analyst in Technology Consulting (Data Science) January 2023 - Present

- Consulting various clients like HCL, and NOKIA to offer them the best solutions related to data science problems faced by them in any technological domain.
- Utilize established company intelligence processes to develop and implement highly effective business solutions.
- Contribute significantly to strategic decision-making by comparing and analyzing data. Play a pivotal role in generating actionable insights for improving performance up to 30%.
- Collaborate with cross-functional teams to implement technological solutions for clients, resulting in a reduction of IT expenses by 10%.
- Domains vary from Automation, data science to cloud solutions.

INTERNSHIPS

Title: ***Research Intern*** June 2022 – August 2022
Company: **EY (Ernst & Young)**
Description:

- Coordinated logistics and managed communication for ten high-profile clients, resulting in successful execution and increased brand recognition for the clients.
- Collaborated with the EY team to develop innovative award categories, driving an increased submission volume and providing new opportunities for client recognition.
- Assisted renowned companies like Dell, Make my Trip, Indian Medical Association.

Title: ***Software Development Intern*** December 2021 – June 2022
Company: **Exodrone Systems**
Description:

- Designed a custom version of Mission Planner, an open source software which is a part of Ardu-pilot for Exodrone Systems. (Mission Planner is a full featured ground station application for operating drones).
- Developed and tested new features for the custom version, resulting in a significant increase in user satisfaction based on customer feedback.
- Collaborated with the hardware team to integrate the custom software with Exodrone Systems' drones, reducing testing time by 20% and improving overall product quality.

Title: ***Software Development Intern*** June 2021 – December 2021
Company: **NIIT Technologies/Coforge**
Description:

- Spearheaded the development of an AI-based attendance system for NIIT University, leveraging advanced technologies such as CNNs with Keras and Tensorflow to create a streamlined solution.
- Collaborated closely with cross-functional teams to ensure seamless integration of the attendance system, resulting in a significant reduction of around 90% in time spent on manual tracking.

RESEARCH PAPER

Title: ***ECG anomaly detection using an interpretable Autoencoder model***
Description:
Authored the research paper under Dr Sudip Sanyal which discusses the hidden layers of any machine learning model being black boxes. We know the math that goes in developing a machine learning model. But we do not know or we cannot visualize what is actually happening inside the hidden layers of the model. To overcome this, it is imperative to understand and visualize these hidden layers. In this research paper, we highlight the ways through which the nodes which make up the hidden layer of the autoencoder model are visible. The research paper has been sent to the 4th International Conference on Machine Learning and Applied Network Technologies for approval and its subsequent publication.

ACADEMIC PROJECTS

Title: ***Cardiac Problem Detection using Autoencoders*** January 2022 - December 2022
Team Size: 2 **Role**: Team Lead
Summary/Description:

- Developed an interpretable machine learning model to detect anomalies in ECG signals making use of Autoencoders.
- Designed the system to detect any anomalies in the heartbeat of patients leading to any early diagnosis.
- Executed making use of Keras, and Tensorflow with various boosting methods (XGBOOST, ADABOOST).
- Project Link

Title: ***Plant Disease Classification using CNNs and Google Cloud Services*** June 2022 - December 2022
Summary/Description:

- Independently devised a system for detecting diseases in staple food plants like potatoes, such as tomatoes for early diagnosis using photos of their leaves. The main diseases being focused on Late and Early Blight.
- The classification model is uploaded to Google's cloud platform and can be called as a function from anywhere, anytime around the globe.
- The system has been deployed as a mobile app as well as a web-app which are used to call the GCP function to classify the image.
- Executed making use of a CNN through Keras, Tensorflow and hosted the web application using FastAPI.
- Project Link

Title: ***Treaty Deals*** **[NIIT University, Capstone project]** January 2021 - August 2021
Team Size: 4 **Role**: Team Lead
Summary/Description:

- Developed a MERN stack web app with a client and user side which allows vendors and service providers to list their services for potential customers.
- Customers can book a service through the web-app itself after comparing prices and suitability.
- Executed using MongoDB atlas cloud service through ExpressJS.
- Project Link

Title: ***Swipe Right – A Playdate app for Pets*** September 2021 - March 2022
Team Size: 3 **Role**: Team Lead
Summary/Description:

- Developed a MEAN stack web app to develop a community of pet parents to interact with other pet parents for various needs like fostering, adoption, setting up playdates for their pets etc..
- The app provides functionalities such as texting, voice calling, and liking pictures.
- Made use of Cloudinary API for storing media files such as the photos/videos uploaded by the user. And used CometChat API for app functionalities such as texting, voice calling.
- Project Link

Title: ***Hand Gesture Control System using CNNs*** January 2022 - August 2022
Team Size: 2 **Role**: Team Lead
Summary/Description:

- Developed a control system which uses hand gestures and motion to control someone's device such as a personal computer by assuming control of their keyboard and mouse.
- The user can perform various functions without manual effort.
- The CNN was used to learn a set of particular gestures which were then mapped to perform specific tasks.
- Project Link

CERTIFICATIONS/ADDITIONAL COURSES

- DP-100: A-Z Machine Learning using Azure Machine Learning.
- Artificial Intelligence 2023: Building an AI with ChatGPT4.
- Introduction to Cloud Computing.

ACHIEVEMENTS/EXTRACURRICULAR

- EY Silver badge achiever in excellence in Artificial Intelligence and Machine learning.
- Academic Scholarship under the NU Scholar Search Programme at NIIT University.
- National basketball player (U19).
- Trained guitarist.

TECHNICAL SKILLS

- **Programming:** Python (Numpy, Pandas, Scikit-Learn, Pytorch, Tensorflow, Keras, Matplotlib, Scipy), SQL , C++ , HTML , CSS
- **Topics:** Artificial Intelligence, Machine Learning, Algorithms, Data Structures, Deep Learning
- **Technology:** MongoDB, Angular , ExpressJS (Novice), Django, Microsoft Azure, Google cloud Platform
- **Languages:** English, German, Hindi