JAY JHAVERI

EDUCATION

Masters of Computer Science

Sept 2022 – Dec 2023 (Expected)

University of California, San Diego (UCSD)

CGPA: 3.95/4

Relevant Courses: Deep Learning, Scalable Data/ML Systems, Recommender Systems, Computer Vision

Bachelor Of Engineering (Computer Engineering)

August 2018 – July 2022

Vivekanand Education Society's Institute of Technology (VESIT)

CGPA: 9.013/10

<u>Relevant Courses</u>: Machine Learning, Artificial Intelligence, Big Data Analytics, Distributed Systems and Computing

INTERNSHIP EXPERIENCE

Full Stack Developer, Stealth Startup

Feb 2023 – Present

- Integrating Python-based DL architecture to a user-friendly Web Application utilizing AWS and React JS.
- Secured 100K\$ in funding in AWS credits from Adobe.

Full Stack Development Intern, Makos Infotech

June 2021 - July 2021

- Developed Server-side rendering for their main website (Jobaskit.com) utilizing JQuery, PHP, and MySQL, which targets automating the On-campus placement process for various colleges.
- Managed existing and created relational databases using MySQL Workbench and deployed them on AWS.
- Co-Pitched the product to a university alongside the founder & mentored new intern recruits working on the digitalization of the teaching process, aiming to assist colleges in operating efficiently in virtual mode

Data Analyst Intern, Leadingindia.ai

May 2020 – June 2020

- Worked in a team of four to build a Vaccine Prediction model on the H1N1 and seasonal flu vaccines to accurately predict the trends of the public acceptance rate (41%) of the Covid-19 vaccine.
- Research Paper was published in Springer & I wrote a Blog showcasing the correlation between the two pandemics.
- Achievement: Secured First position for the mentioned research project amongst my peers.

Data Analyst Intern, Núclei Technologies

Dec 2018 - Jan 2019

Applied several supervised ML algorithms such as Linear regression & random forest in R & Python to predict sales
of products at specific BigMart store locations based on previous sales data.

PROJECTS

Self Driving Car

Feb 2023 – March 2023

Built a self-driving car using QLearning and Deep Q-Network on the PyGame GUI.

Game Genre and Recommendation Classification using Steam Reviews

Nov 2022 – Dec 2022

Designed Machine Learning techniques to classify game genres and determine user recommendations based on reviews, hours played, etc. Various models were tested, including N-gram, Multinomial NB, and Linear SVC. Random Forest with Balanced data gave the highest accuracy of 90.53%. *Tech Used:* Python, Pandas, TF-IDF, scikit-learn, TensorFlow

VisionNumpy: Computer Vision Applications

Sept 2022 - Dec 2022

- Building an image captioning deep learning algorithm using a CNN-LSTM architecture using COCO dataset.
- Implemented edge detection and corner detection from scratch with NMS and hypothesis thresholding.
- Implemented SLP, MLP and CNN using Pytorch to perform classification on MNIST dataset.
- Implemented UNet architecture to perform semantic segmentation and compared it with transfer learning on ResNet16.

Divya-Drishti: An Independent Aid for the Visually Impaired

Aug 2020 – May 2021

Created a Voice-activated standalone IOT application using Raspberry Pi4 to help <u>Visually Impaired People</u> accurately detect Indian Currency notes, colors, and everyday objects. The project was funded under the <u>Mumbai University Minor Research Grant Program</u>. Received feedback from the members of <u>National Association for the Blind</u> (NAB). Achieved a <u>400%</u> in net <u>cost reduction</u> compared to products made by OrCam. <u>Tech Used: TensorFlow, OpenCV2, Google Cloud, Raspberry Pi, Android-Java, Linux, Python. Achievement: Published a research paper highlighting the needs of VIPs.</u>

Automated Number Plate Recognition & Parking System

Dec 2019 – Feb 2020

Built android application connected to a Firebase server, to automate security and space availability in car parking systems by monitoring the number plates detected at the exits, utilizing already installed CCTVs at the entry and exit gates of parking lots. *Tech Used: Tesseract OCR, Firebase, Android-Java, Python*

RESEARCH PUBLICATIONS

Inampudi S., **Jhaveri J.** et al., (2021) **Machine Learning Based Prediction of H1N1 and Seasonal Flu Vaccination**. 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_11)

Technical Skills: Python, PyTorch, TensorFlow, DL/ML/AI, OpenCV2, Java, C, R, SQL, AWS, Google Cloud