JAY JHAVERI

**EDUCATION** 

## **Masters of Computer Science**

**Sept 2022 – Dec 2023 (Expected)** 

University of California, San Diego (UCSD)

CGPA: 3.95/4

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

#### 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, Natural Language Processing, Software Development

INTERNSHIP EXPERIENCE

## 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.
- Worked on the website's front-end design using the prototyping tool Figma, followed by bootstrap.
- 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.
- <u>Achievement</u>: Secured First position for the mentioned research project amongst my peers.

## **App Developer, Dalvik Apps**

Dec 2019 – Jan 2020

 Designed and developed a Car Coin Collection game using C Sharp (C#) and created a UI-friendly library management system. Built an Android app using Android-Java as a substitute for default calling & messaging apps

### 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** 

## **Semantic Segmentation using Transfer-Learning and U-Net**

Feb 2023 - March 2023

Pixel-level segmentation on the PASCAL VOC-2007 dataset using various models and techniques like weighted loss. The evaluation metrics were pixel accuracy & intersection over union (IoU). The best results were obtained using transfer learning with a modified ResNet18 model, achieving an IoU of 15%, pixel accuracy of 74.4%. *Tech Used: Python, PyTorch* 

### **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 compared, 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

# 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 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**

**ADDITIONAL INFORMATION** 

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. (<a href="https://doi.org/10.1007/978-981-16-0401-0\_11">https://doi.org/10.1007/978-981-16-0401-0\_11</a>)

■ Technical Skills: Python, PyTorch, TensorFlow, OpenCV2, Java, C, ML/AI, Cuda, AWS, Google Cloud, Firebase