**Education**

**Masters of Computer Science Sept 2022 – Dec 2023 (Expected)**

University of California, San Diego (UCSD) CGPA: 3.9/ 4

*Relevant Courses*: Computer Vision, Deep Learning, Scalable Data/ML Systems, Recommender Systems, AI: Probabilistic Reasoning and Decision-Making, Design and Analysis of Algorithms

**Bachelor Of Engineering (Computer Engineering) August 2018 – July 2022**

Vivekanand Education Society’s Institute of Technology (VESIT) CGPA: 9.013/ 10

*Relevant Courses*: Machine Learning, Big Data Analytics (Hadoop), Artificial Intelligence and Soft Computing, Software Development, Data Warehouse and Mining, Natural Language Processing, Distributed Sytems and Computing, Data Structures, Object Oriented Programming, Analysis of Algorithms, Database Management System, Computer Networks, Cryptography/System Security, Web Development, Operating Systems, OOPM (Java) Lab

**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](https://doi.org/10.1007/978-981-16-0401-0_11) was published in Springer & I wrote a [Blog](https://medium.com/@jjhaveri1906/pandemics-a-harsh-reality-7c05254e907b) showcasing the correlation between the two pandemics.
* *Achievement: 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 June 2021 – May 2022**

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 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

**Aatmanirbhar Sanchar: Secure Self-Sufficient Communications June 2021 – May 2022**

In collaboration with the Tata Institute of Fundamental Research (*TIFR*), developed an off-the-grid secure (SHA-256) chat application without using any third-party APIs in the light of recent data piracy issues. *Tech Used:* *Python, React JS.*

**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 Visually Impaired People accurately detect Indian Currency notes, colors, and everyday objects. The project was funded under the Mumbai University Minor Research Grant Program. Received feedback from the members of National Association for the Blind (NAB). Achieved a *400%* in net cost reduction compared to products made by OrCam. *Tech Used:* *TensorFlow, OpenCV2, Google Cloud, Raspberry Pi, Android-Java, Linux, Python. Achievement: Published a* [*research paper*](https://dx.doi.org/10.2139/ssrn.3867707) *highlighting the needs of VIPs.*

**Code for Change Hackathon: A Data Extraction project Nov 2020 - 24 hours**

Developed data extracting software for Global Parli Foundation NGO to automate the translation of Land/Farm ownership papers’ pdf originally in Devanagari Script into an editable excel sheet using OCR. *Tech Used:* *Django, Google Cloud, Html/CSS. Achievement: Secured* ***First*** *position for the data extraction project amongst the 72 teams participating.*

**“Mental Health Messiah” Twitter Bot June 2020 – Aug 2020**

Leveraged sentiment analysis to build a bot to help people suffering from mental health issues related to COVID-19. *Tech Used:* *IBM-Cloud API, Twitter API, Python, React JS, Angular JS*

**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*

**International Flutter Hackathon: Healthy While Distant June 2020 - 48 hours**

Devised a user-friendly Flutter app that leveraged the existing Bluetooth Low Energy (BLE) technology in smartphones to help users maintain social distancing during the COVID-19 pandemic. The app alerts the user if they come within six feet of another smartphone and includes an additional feature of teaching yoga moves to stay fit while quarantining. *Tech Used:* *Flutter, Dart, BLE. Achievement: Secured top 150 position amongst all the teams participating world wide.*

**Research Publications**

**Jhaveri, J.**, Gupta, A., Chhabria, P., Ochani, N. and Sengupta, S., Dugad, S., (In Press). **Aatmanirbhar Sanchar: Self-Sufficient Communications**. International Conference on Intelligent Cyber Physical Systems and Internet of Things. ICoICI 2022. Engineering Cyber-Physical Systems and Critical Infrastructures, ECPSCI vol 3. Springer (<https://link.springer.com/book/9783031184963>)

**Jhaveri, J.**, Gupta, A., Chhabria, P., Ochani, N. and Sengupta, S., 2021. **Divya-Drishti: An Independent Aid for the Visually Impaired**. *SSRN Electronic Journal*. (<https://dx.doi.org/10.2139/ssrn.3867707>)

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>)

**Additional Information**

* **Leadership & Achievements:**
* **VESIT Renaissance Cell (2020):** Led a team of 6 peers working on the design & implementation of a Django-based [Paper Publication Easy-to-use Website](https://cmpn-publications-official.herokuapp.com/) to facilitate sharing the faculty’s research work with students.
* Secured 1st place in Code for Change Hackathon held amongst 72 participants across the university.
* **Technical Skills:** Python, PyTorch, TensorFlow, OpenCV2, SQL, Java, C, Javascript, C, AWS, Google Cloud, Firebase, HTML/CSS, Android-Java, React JS, Django, PostgreSQL, Linux, Android Studio, Flutter, Object Oriented Programming