**Education**

**Masters of Computer Science Sept 2022 – June 2024 (Expected)**

University of California, San Diego (UCSD) CGPA: 3.97/ 4

*Relevant Courses*: Software Engineering, Advanced Computer Vision, Deep Learning, 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*: Software Development, Data Structures, Web Technologies, AI, Big Data Analytics (Hadoop)

**Internship Experience**

*Cyber Security & Machine Learning Intern,* **Legendary Entertainment**  **June 2023 – Present**

* Reduced false positive anomaly detection time by 10x by Streamlining employee online activity monitoring using Splunk Dashboard, Python scripting and integration with Azure MSGraph API.
* Contributed to integrating a FIDO Alliance product into the SSO workflow, enhancing security and user experience.
* Assisted in foundational work for the Shared Learning Intelligence Platform (SLIP) to improve anomaly detection in security cloud brokers in collaboration with Sky High Security.

*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 online job placement portal, Jobaskit, to 3 University professors alongside the founder.
* Mentored 2 intern recruits working on the digitalization of the teaching process.

*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.
* Secured first position for the mentioned research project amongst 85 peers intercollege.

**Projects**

**[MedLM: Exploring Language Models for Medical QnA Systems](https://arxiv.org/abs/2401.11389) March 2023 – Aug 2023**

* Led team of 4 in fine-tuning diverse language models (e.g., bloom, t5, gpt2) on the MedQuad dataset, comparing them with larger models (gpt3.5, gpt4) using direct questions and dynamic prompt engineering.
* Collaborated with Microsoft researcher Dr. Asma Ben Abacha, creator of MedQuad dataset, for expert guidance.
* Utilized ROUGE, BLEU metrics and conducted human surveys for doctors and patients to evaluate the model.

**[Self-Driving Car](https://github.com/JayJhaveri1906/QLearning-F1-Car-Autonomous-Driving) Feb 2023 – March 2023**

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

[**Divya-Drishti: An Independent Aid for the Visually Impaired**](https://github.com/JayJhaveri1906/Divya-Drishti) **Aug 2020 – May 2021**

* Achieved a *400%* net cost reduction by creating a Voice-activated AI-IoT android application to help Visually Impaired People (VIPs) comparable to state-of-the-art OrCam in detecting currency, objects and scenes.
* Received vital feedback on the Android-Java app from National Association for the Blind (NAB)’s members.
* Published a [research paper](https://dx.doi.org/10.2139/ssrn.3867707) highlighting the needs of VIPs funded by the Mumbai University Minor Research Grant.

[**Aatmanirbhar Samakraman: Auto File Synchronization Android Application**](https://github.com/JayJhaveri1906/Auto-File-Sync-App) **June 2021 – May 2022**

* Led a team of 4 to develop an android application that monitors a selected directory and uses multi-part upload methodologies to encrypt and securely upload to the dedicated remote server hosted via Node JS.
* Utilized Google Maps and Sheets API to build a Bootstrap based website for live tracking feature of the uploader.

**[Code for Change Hackathon: A Data Extraction project](https://github.com/JayJhaveri1906/Saath-Baara-Utara-OCR-The-7-12-OCR) Nov 2020**

* Developed Django-based data extracting software for Global Parli Foundation NGO to automate the translation of Land ownership papers’ pdf originally in Devanagari Script into an editable Excel sheet using Google Cloud OCR.
* Secured First position for the web application amongst the 72 teams participating.

**Research Publications**

**Jhaveri, J.**, Gupta, A., Chhabria, P., Ochani, N. and Sengupta, S., 2021. **Divya-Drishti: An Independent Aid for the Visually Impaired**. *SSRN Electronic Journal*. [DOI.org Link](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**. Advanced Computing. IACC 2020. Communications in CIS, vol 1367. Springer, Singapore. [DOI.org Link](https://doi.org/10.1007/978-981-16-0401-0_11)

* **Technical Skills:** Python, Java, Javascript, C, PyTorch, SQL, HTML/CSS, Splunk, SPL, Git, AWS, Google Cloud, Firebase