

## EDUCATION

### Masters of Computer Science

Sept 2022 – June 2024 (Expected)

University of California, San Diego (UCSD)

CGPA: 3.95/ 4

Relevant Courses: Recommender Systems, Adv Computer Vision, Advanced NLP, DL, 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

Relevant Courses: Machine Learning, Big Data Analytics, AI, Software Development, OOPs (Java), Data Structure (C)

## 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 and Python scripting.
- 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.
- 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](#) was published in Springer & I wrote a [Blog](#) showcasing the correlation between the two pandemics.
- Secured first position for the mentioned research project amongst 85 peers intercollege.

## PROJECTS

### Conversational QnA LLM between Doctor-Patient

March 2023 – July 2023

- Experimented by comparing Fine-tuned distilled generative text models like GPT2, Bloom with larger general models like GPT 3.5 and 4 for a Doctor Patient QnA conversation.
- 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 prompt engineering.
- Collaborated with Microsoft researcher Dr. Asma Ben Abacha, creator of MedQuad dataset, for expert guidance.
- Utilized ROUGE, BLEU metrics, and conducted user surveys for doctors and patients to evaluate model performance.

### GrooveGenie: A copyright-free music generator

March 2023 – Present

- Created an open source music generation model, utilizing Facebook's EnCodec Transformer model to compress audio wav files to an embedding that can be understood by the model.
- Training a conditioned GAN network that generates music based on user-provided genre inputs embedded using the BERT model, with a goal of creating only copyright and royalty-free music, being trained on the FMA dataset.
- Trying out different, more efficient Diffusion/Transformer architecture to generate audio.

### Game Genre and Recommendation Classification using Steam Reviews

Nov 2022 – Dec 2022

- Designed data pipelines to preprocess and apply machine learning techniques to classify game genres and also personalize game recommendations using the user's reviews and hours played.
- Out of N-gram, Multinomial NB, and Linear SVC, RF with Balanced data & TF-IDF gave the highest accuracy of 90.53%.

### Divya-Drishti: An Independent Aid for the Visually Impaired

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 feedback, on the android-Java app developed, by National Association for the Blind (NAB)'s members.
- Published a [research paper](#) highlighting the needs of VIPs.

## 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](https://doi.org/10.1007/978-981-16-0401-0_11))

- Technical Skills:** Python, PyTorch, TensorFlow, OpenCV2, Java, C, Sklearn, Pandas, SQL, AWS, Google Cloud, Git