

PROJECTS

AI Project Intern: Design Innovation Centre (DIC) - Hub , GTU · Internship

Oct.2024 - Present

- Working on the project titled: "Predicting Alzheimer's Disease Risk Using Multimodal Imaging and Genomics Data".
- Presented work at the international conference 'CDBBI2025' in Ahmedabad on February 4, 2025.

Post Graduation Dissertation Project

Dec.2023 - June 2024

- Wrote & presented a Thesis titled: "Multimodal Breast Cancer Classification with Medical-Based Transfer Learning".
- Developed variations of multimodal CNN algorithms (feature level fusion) by using RadImageNet-based pre-trained CNN algorithms (trained on medical images) and publicly available breast image datasets (MRI, Ultrasound, and Thermal) for breast cancer classification.
- Learned to preprocess images, fine-tune & hyperparameter-tune the models, model inference, introduced to CUDA & CentOS to use HPC server, and understood the ethical concerns for medical implications of AI.

Smart India Hackathon (SIH) 2023 Problem Statement: "AI-based PG Dissertation Management System"

- As a member of the team 'Rebooters', contributed by creating the best match profile ranking predicting model through the Random Forest algorithm.
- Was introduced to technologies like Backend, APIs, and Feature Engineering and learned to pitch ideas.

Xavier's Undergraduate Research Program

April 2022 - July 2022

- Worked on a research review paper on the role of brain energy metabolism alterations in neurodegenerative diseases, especially Alzheimer's disease.

In-Xitu: A student-run entrepreneurial venture

April 2022 - May 2023

- Led team of four people to manage Tissue culture-based plant production as Head of production.
- Developed a new plant tissue culture-based product with the R&D department's collaboration that was less resourceful for nutrients than the previous products.

TECHNICAL SKILLS

Languages: Python, R Programming**Softwares:** VS Code, Jupyter Notebook, Google Collab, GitHub, Tableau, Weka, AutoDock, VCFtools**Deep learning Framework:** Tensorflow, Keras, PyTorch**Library:** OpenCV, NumPy, pandas, Pillow, scikit-learn, Matplotlib, Nibabel

EDUCATION

PG Diploma in Bioinformatics [2023 - 2024]

Gujarat Technological University

Coursework: Computer Aided Drug Design, Statistics, Python, Cloud Computing, Data mining & Visualization, Machine Learning in Bioinformatics (Subpart)

B.Sc. in Biochemistry with Vocational Biotechnology [2020 - 2023]

St. Xavier's College, Gujarat University

Coursework: Molecular biology, Clinical Biochemistry, Recombinant DNA technology, Molecular Physiology

CERTIFICATES

- Convolutional Neural Networks from DeepLearning.AI through Coursera
- Improving Deep Neural Networks: Hyperparameter Tuning, Regularization, and Optimization from DeepLearning.AI through Coursera
- AWS Foundational Cloud Computing from Kaushalya The Skill University (Pursuing)
- Mathematics for Machine Learning Specialization from Imperial College London through Coursera