



EDUCATION

Degree	Institute/Board	CGPA/Percentage	Year
Bachelor of Technology	Indian Institute of Technology, Ropar	8.09	2020-2024
Senior Secondary	Central Board of Secondary Education	95.4%	2020
Secondary	Central Board of Secondary Education	93.2%	2018

EXPERIENCE

- Samsung R&D Institute India, Bangalore** June 2023 - August 2023
Memory Optimisation of Header Files SDE Intern
 - Interned under the MAC Interop division of the Network Modem Team.
 - Got to know about the concept of Data Padding in compilers & also about the additional memory that is used due to this.
 - Optimized memory utilization by efficiently managing additional memory to prevent wastage.
 - Implemented this process in Python for header files containing C structures with diverse data types and parent C structures.
- Research Intern at IIT Ropar** May 2022 - July 2022
Guide: Dr. Ashish Sahani Summer Intern 2022
 - Worked on detection of Seizures by the help of pose detection of the patient.
 - Used OpenCV and Mediapipe for Pose Detection and then built a LSTM Model with Attention for Seizure Detection

PROJECTS

- PlantDoc** Jan 2023 - May 2023
Under the Guidance of Dr.Subrahmanyam Murala (Group Project) GitHub
 - Developed a Deep Learning Model using MobileNetV1 architecture for disease detection in potato & corn crops based on leaf images and used transfer learning to achieve high accuracy
 - Hosted the model on Google Cloud Platform (GCP) and integrated it into a mobile application using Flutter
- CDPC Manager** June 2023
Tools Used : Django , HTML , CSS , SQLite GitHub
 - Co-designed and constructed a Django-based website for the college's Career Development and Placement Cell (CDPC) competition
 - Implemented features such as Institute ID-based authentication, multi-level user roles, and advanced filtering
- Recolorization of GrayScale Images** April 2023
Tools Used : Tensorflow , Scikit learn , Matplotlib (Group Project) GitHub
 - Generated colored images from grayscale images using GANs
 - Used U-Net Architecture for Generator whereas for discriminator implemented a convolutional-based classifier
- PageRank Algorithm in C++** July 2022
Concepts: Markov Chains, Graphs (Group Project) GitHub
 - Efficient PageRank algorithm for ranking web pages.
 - Implemented Random Surfer Model and iterative algorithm for website importance & used Adjacency List for graph representation.

TECHNICAL SKILLS

- Programming Languages:** C/C++, Python , MATLAB
- Development Tools/Framework:** HTML5 , CSS , Django
- Tools/Libraries:** OpenCV, Mediapipe , TensorFlow , Keras , PyTorch

KEY COURSES TAKEN

- CSE & Maths:** Data Structures & Algorithms , Linear Algebra , Machine Learning , Artificial Intelligence (Ongoing) , Foundations of Data Science (Ongoing)
- Core Electrical:** Communication Engineering , Digital Circuits , Control Engineering , Circuit Theory , Signals & Systems

POSITIONS OF RESPONSIBILITY

- Representative, AI Club, IIT Ropar** July 2022 - Nov 2022
Founded and led the AI club, promoting skill development and event participation.

MISCELLANEOUS

- * Cleared SWC Advanced Test during my internship in Samsung
- * Among the top 10,000 candidates out of 1.5 lakhs candidates in JEE Advanced 2020
- * Secured Zonal Rank of 2 (in HP and J& K region) in NSO-SOF