G V RITESH RAMAN

ACADEMIC PROFILE			
Degree/Certificate	Institution	Percentage/CGPA	Year
B-Tech	Mechanical Engineering IIT (BHU), Varanasi	9.06	2026
CBSE (XII)	DAV Public School	96.00	2022
CBSE (X)	DAV Public School	98.60	2020

SKILLS

Languages and Technologies: C, C++, Python, MySQL, HTML, CSS, Javascript, ReactJs, Bootstrap, NodeJs, Pandas, Numpy, Matplotlib, Seaborn, Scikit-Learn, Tensorflow, Keras, OpenCV.

Area of Interest: Software Development, Data Structures and Algorithms, Machine Learning, Generative AI, Data Science, Competitive Programming, Business and Finance.

PROJECTS

Emotion Detection using CNN

(Nov'23- Dec'23)

Tech Stack: Python, TensorFlow, Keras, Transfer Learning, ReNet50v2, VGG16, OpenCV, Gradio

- Addressed class imbalance in the FER-2013 dataset by employing image augmentation and class weights, improving model robustness.
- Designed and iterated on custom CNN models, including advanced architectures like VGG16 and ResNet50v2, to optimize performance.
- Achieved a 64% overall accuracy with final model based on ResNet50v2, detailed through precision, recall, F-1 scores and AUC ROC plots across 7 emotion labels.
- Deployed the model for real-time emotion detection using Gradio and OpenCV. Github

Automatic License Plate Detection using YOLOv8

(May'24- July'24)

Tech Stack: Python, Pytesseract, YOLO, Object Detection, Computer Vision

- Extensively processed XML files of the pre-annotated dataset containing 433 images and converted them to YOLO format
- Trained the dataset on a YOLOv8 model for 100 epochs and made prediction for the license plate bounding box as well as extracted the text of license plate.
- Achieved a mean Average Precision (mAP) of 0.90 at IoU=0.5 and 0.53 at IoU=0.5:0.95. Github

Hotel Booking System

(Apr'24- May'24)

Tech Stack: ReactJS, NodeJS, MongoDB, Express, Mongoose, Git.

- Built a **Full Stack Hotel Booking Website** using the **MERN** stack. The site is fully responsive and let users book hotel rooms and they must be **authenticated** to book a room and access the dashboard.
- Includes an Admin panel where admins can add hotels, manage rooms, and handle user bookings.
- Incorporated Filtering options to search hotels by various criteria combined with aresponsive design. Github

POSITION OF RESPONSIBILITY

Marketing Executive, Kashiyatra 2023

(Oct'22-Jan'23)

• Played a pivotal role in securing sponsorships by identifying potential sponsors, preparing compelling sponsorship proposals and negotiating partnership agreements to meet the festival's financial objectives

Strategy and Outreach Associate, E-Cell, IIT BHU

(June'23- June'24)

- Recruited, guided and mentored 30+ campus ambassadors under the Campus Executive Internship Program.
- Launched and executed the Startup Internship Program databasing and coordinating with 150+ startups.
- Formulated and ideated the **National Entrepreneurship Challenge** helping colleges all over India to develop E-Cell in their colleges.

HONOURS AND ACHIEVEMENTS

- Secured All India Rank 7083 in JEE Advanced 2022 among the 1.6 Lakh shortlisted candidates.
- Solved 200+ problems on Codeforces, GeeksForGeeks and Leetcode . | Handles:gvritesh , gvriteshratluv, gvriii

EXTRA-CURRICULAR ACTIVITIES

• Competed amongst 120+ participants in the Intra-Freshers Badminton Tournament of IIT(BHU) 2022-23 and emerged as the Champion.

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