Pratyush Kargeti

Address: Residential Qtrs. DIS Riverside Campus, Pondha, Dehradun, Uttarakhand, Zip code-248007
Mobile: +91-9839818079 — **Home:** +91-8954849239 — pratyushkargeti1313@gmail.com — GitHub — LinkedIn

ACADEMIC DETAILS

Year	Degree/Exam	Institute	CGPA/Percentage(%)
2021 - Present	B.TECH in Computer Science	Graphic Era University Dehradun	9.0
2020	12th, C.B.S.E	Doon International School, Dehradun	92.60%
2018	10th, C.B.S.E	P D D S Vidya Mandir, Mathura	95.00%

PROJECTS

- **Retinal Image Analysis for Diabetic Retinopathy**
  Tech Stack- Machine Learning, Deep Learning, Transfer Learning, TensorFlow, Keras, Scikit-Learn, Numpy, Pandas, Matplotlib, Seaborn, Python

  Applied machine learning, deep learning, and transfer learning on APTOS 2019 Blindness Detection Dataset. A CNN classifier based on the DenseNet121 network (trained for ImageNet) performed best with an accuracy of 77.89 % for 5-class severity classification.

- **RESTful API Development for Student Records Management**
  Tech Stack- Express.js, MongoDB (with Mongoose), Joi, Postman, MongoDB Compass, Node.js

  Developed a RESTful API for managing student records using Express.js and MongoDB. Implemented CRUD operations to handle student data efficiently. Utilized Joi for data validation and Postman for API testing. Integrated and managed MongoDB database using MongoDB Compass.

- **Web Blog Application**
  Tech Stack- NodeJS, CSS, JavaScript, EJS

  This application allows users to add, edit, delete multiple posts. It is built using Nodejs, ejs, css, and javascript.

- **Brain Tumor Detection using Machine learning and Deep learning**
  Tech Stack- TensorFlow, Keras, Numpy, Python, Machine Learning, Deep Learning, Scikit-Learn

  Tested various Machine learning models and Deep learning models on Brain MRI images dataset from Kaggle. Random Forest classifier worked best for binary classification with the accuracy of 87.75%

- **MakeNotes-App**
  Tech Stack- HTML, CSS, ReactJS, NodeJS

  A MakeNotes-App built using HTML, CSS, REACTJS, and NODEJS. Allows user to add and delete multiple notes.

- **Digits Classification using Machine Learning**
  Tech Stack- Sklearn, Pandas, Machine Learning

  Applied machine learning algorithms on Sklearn digits classification dataset and achieved best accuracy of 99.16 % using Support Vector Machine.

- **Real-Time Human Detection and Counting System**
  Tech Stack- TensorFlow, Tkinter, Python, CNN, Computer Vision

  Used TensorFlow Object Detection API to detect and count humans in images, videos, or live webcams.

- **Driver Drowsiness Detection System**
  Tech Stack- OpenCV, Keras, Pygame, TensorFlow, CNN, Computer Vision

  Utilized OpenCV, Tensorflow, Keras, and Pygame to capture real-time webcam images. Developed a CNN classifier to gauge driver drowsiness and trigger alarms.

- **QuizUp: A Quiz Application**
  Tech Stack- JavaScript, CSS, HTML5

  Created a dynamic and user-friendly Quiz Application using HTML, CSS, and JavaScript. Features include immediate feedback, progress tracking, result calculation, and reset quiz functionality.

- **Signature Verification System using OpenCV and Contour Matching**
  Tech Stack- OpenCV, Python

  Implemented a signature verification system using OpenCV. Analyzed signatures through contour analysis and shape matching techniques for match/mismatch evaluation.

TECHNICAL SKILLS

- **Languages:** C++, C, HTML, CSS, Java, Python, PHP, JavaScript, SQL, ReactJS, NodeJS, EJS, ExpressJS, MongoDB

- **Tech Tools and Frameworks:** GitHub, Git Bash (Git Version Control), XAMPP (database connectivity using PHP), VSCode, CodeBlocks, Postman, Joi, MongoDB Compass, Flex(lexical analyzer), Bison(parser generator)

- **Machine Learning Tools and Libraries:** Tensorflow, Keras, Scikit-learn, Matplotlib, Numpy, Pandas, Seaborn, OpenCV, GridSearchCV (hyper-parameter tuning), Google Colab, Jupyter Notebook, Anaconda Prompt(Miniconda3)

- **Soft Skills:** Problem-solving, Active listening, Patience, Critical thinking, Creativity, Accountability, Confidence, Time and project management

- **Additional Proficiency:** Computer Networks, Operating Systems, Databases, Data Structures & Algorithms, Theory of Computation

SCHOLASTIC ACHIEVEMENTS

- **Tech Traverse 1.0:** Won third prize in Final Coding Round of Tech Traverse 1.0 organized by ISTE in Graphic Era and a cash prize of Rs.2000

- **JEE MAIN:** Cleared JEE MAIN Examination in 2021 and got offered from an NIT for B.Tech Mechanical Engineering. Also qualified for JEE ADVANCED.

- **School Topper:** Ranked first in class X Board Examination and among top 3 in class XII Board Examination

- **Subject Proficiency:** Scored 80/80 in Maths (Class X) and 96 percentile in Chemistry (JEE Mains)

- **Sports and Music:** Participated in State Level Badminton Tournament, District Level Cricket Tournament and represented school in various Inter School Music and Quiz Competitions.

CODING PLATFORMS

- LeetCode: CodingBoy100

- StopStalk: algorithmicPK