Utpal Raj

utpalraj1609@gmail.com | (+91) 78149 67881
GitHub: github.com/utpal16raj09 | LinkedIn: linkedin.com/in/utpal-raj-0380b6284
Portfolio: rajutpaltech.vercel.app (Desktop)

Professional Summary

B.Tech CSE student at SRM University (CGPA: 9.53) with a strong focus on real-world problem solving and applied software development. Solved 300+ DSA problems across LeetCode, GFG, and various platforms. Built multiple AI and GUI-based tools using Python, OpenCV, and Tkinter. Quick to learn, strong with core CS concepts, and passionate about building tools that solve real problems.

Technical Skills

Languages: C, C++, Python, Java (Basics)
Tools and Frameworks: Git, GitHub, Tkinter, OpenCV, SQL, HTML, CSS, JS
Core Concepts: Data Structures Algorithms, OOP, DBMS, Computer Networks
Soft Skills: Teamwork, Leadership, Adaptability, Quick Thinking

Projects

Text Comparison Tool   *Mar 2024 – May 2024*
Developed a desktop application that allows users to load or enter two different texts/files, compares them word-by word, and highlights similar content using natural language processing techniques. Implemented user-friendly GUI with real-time comparison and similarity percentage display.
Tech: Python, Tkinter, nltk, difflib

Age & Gender Detection   *May 2024 – June 2024*
Built a real-time computer vision application that detects human faces from webcam feed and predicts age and gender using pre-trained deep learning models. Integrated 68-point facial landmark detection for enhanced precision and UI overlay.
Tech: Python, OpenCV (DNN), Caffe, TensorFlow

Personal Text Editor   *Aug 2024 – Sep 2024*
Created a lightweight text editor with a graphical interface supporting in-browser text editing, basic formatting (like bold, italic, font size), and file operations like save/load. Designed for smooth user experience with a clean UI layout.
Tech: Python, HTML, CSS, JS, Tkinter

Image Enhancement Tool   *Feb 2025 – Mar 2025*
Designed a desktop-based image processing tool that provides real-time preview for enhancement tasks like background removal, grayscale conversion, cropping, and Gaussian blur. Integrated AI-based rembg model for accurate background removal and delivered a clean, dark-themed GUI.
Tech: Python, OpenCV, rembg, Pillow, Tkinter

Education

B.Tech in Computer Science (Data Science)   *2023–2027*
SRM Institute of Science and Technology, Kattankulathur
CGPA: 9.53

Intermediate (Class 12)   *2020–2022*
St. Thomas Senior Secondary School (CBSE)
Percentage: 88.8%

Achievements

- 1st Place – Web3/Crypto Track, OSSome Hacks 2.0 (GitHub Community SRM)
- 3rd Place – AI Project Expo, SRM Institute of Science and Technology
- Solved 300+ DSA problems across LeetCode, GFG, etc. with a contest rating of 1600+

Certifications

- Programming in Java – NPTEL
- Python 101 for Data Science – IBM
- Image Processing, MATLAB Onramp (MathWorks)
- Deep Learning, Machine Learning – MathWorks
- C for Everyone – UC Santa Cruz (Coursera)
- Certificate of Achievement – HackWithIndia
- Problem Solving – SRM eLab Platform

Interests

Web Development, AI Tools, System Design, Open Source Contributions, Football (strategy teamwork), Sketching (creativity detail orientation)