Prateek Ranjan

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NATIONALITY	Indian		

01 PROFILE

Hi! I'm a passionate and curious learner with a strong interest in coding, technology, and building real-world solutions. I began my academic journey at Aravali International School ,where I developed a solid foundation in science and mathematics. Currently, I'm pursuing my higher education at VIT BHOPAL UNIVERSITY, focusing on Computer Science Engineering, etc. My passion lies in coding and problem-solving. I enjoy building projects that make a difference—whether it's a small automation script or a full-stack application. I actively explore technologies like Python, JavaScript, Flask, and AI tools. I'm also learning about areas like machine learning, web development, and open-source collaboration. I'm always excited to learn new things, connect with like-minded individuals, and contribute to tech communities.

02 EDUCATION

Jan 2023 — Jan 2027

VIT Bhopal University

B tech with Computer science AI &ML in Artificial and machine learning

Present

Aravali International School, Faridabad, India

03 SKILLS

- Python
- Java
- C++
- HTML5
- CSS
- JavaScript
- Flask
- Data Visualisation
- Data Analysis
- Machine Learning
- API Integration
- MySql

04 COURSES

Apr 2025 — Oct 2025

IBM Generative AI Engineering at IBM

05 HOBBIES

1.Coding websites, experimenting with AI, creating digital solutions daily."

2."Building web applications, researching AI technologies, developing software projects."

3."Creating websites, testing AI tools,

06 MY PROJECTS

Oct 2024 — Dec 2025

Project-1

C.H.A.O.S AI Desktop Assistant

CHAOS AI is a voice-enabled desktop assistant that integrates Google Gemini AI for conversational capabilities. It can recognize voice commands, respond with text-to-speech, control Spotify playback, open websites, launch applications, and perform other tasks like fetching the current time.

Features:-

Voice Recognition: Uses speech_recognition to process spoken commands.

Text-to-Speech (TTS): Uses pyttsx3 for vocal responses.

Google Gemini AI Integration: Processes general queries and chats.

Spotify Playback: Searches and plays songs using the Spotify Web API.

Web Browsing: Opens websites based on user input.

App Launching: Starts applications via the Windows Start Menu.

Time Retrieval: Announces the current time on request.

Logging Conversations: Saves interactions to conversation_log.txt.

May 2025 — Jun 2025

Project-2

My Portfolio-

Overview

A modern, responsive personal portfolio website showcasing my expertise in Computer Science, AI/ML, and web development. The portfolio demonstrates both my technical capabilities and my commitment to clean, user-friendly design.

Technical Specifications

Frontend Technologies

- HTML5 & CSS3 with modern features (Flexbox, Grid, CSS Variables)

- Vanilla JavaScript for enhanced interactivity

- Responsive design principles for all device sizes

- CSS animations and transitions for smooth user experience

Key Features

- Dark/Light theme toggle with persistent user preference

- Animated scroll effects using AOS (Animate On Scroll) library

- Modern UI components with gradient effects and smooth transitions

- Optimized performance with lazy loading images

- Cross-browser compatibility

- Mobile-first responsive design

Development Practices

- Clean, semantic HTML structure

- BEM methodology for CSS organization

- Optimized assets for fast loading

Performance & Accessibility

- Optimized loading speed

- SEO-friendly structure

- WCAG compliant for accessibility

- Cross-platform compatibility

Feb 2025 — Apr 2025

Project-3

Detection Of Parkinson's disease Using Random Forest Model-

Introduction-

Parkinson's disease (PD) is a chronic, progressive neurological condition that impacts movement and coordination. Typical symptoms are tremor, stiffness of the muscles, and slowing of movement. PD, though, does not simply affect motor control—it also alters speech, leading to softer voice, monotonous pitch, and elevated voice tremor. These small voice variations can be used as early signs of the disease, making voice analysis an attractive, non-invasive technique for early detection.

For this research, we employ a publicly available data set with voice recordings of both healthy subjects and PD patients. The data set comprises important vocal features such as fundamental frequency, amplitude variation, and nonlinear acoustic patterns, all of which have been proven to be influenced by PD. Our work is aimed at:

1. Creating an accurate Random Forest-based model for predicting Parkinson's disease based on voice recordings.

2. Use LIME and SHAP to explain the model's predictions and determine the most significant vocal features associated with PD.

3. Illustrate the capability of explainable AI in developing stable, transparent, and accessible diagnostic systems for the early detection of PD.

By integrating interpretability and machine learning, this research not only improves early PD detection but also establishes trust in AI-driven healthcare solutions. Our aim is to transition towards diagnostic models that are accurate, yet more transparent and clinically meaningful, ultimately enhancing patient outcomes through earlier and more dependable detection

07 LANGUAGES

English

French

Hindi