Ramaditya Chaudhary

✉ Email in LinkedIn ⌨ GitHub 🌐 Portfolio

Education

Bachelor in Technology - Computer Science and Engineering   Sep 2022 - Present
Vellore Institure Of Technology, Bhopal (CGPA: 8.55)

Projects

Banking System   Link
MongoDB, Express.js, Node.js, React.js, JWT, Tailwind CSS

- Developed a full-stack banking platform with secure login, JWT-based authentication, and role-specific dashboards for admins, officials, and customers with real-time data syncing and account management.
- Implemented core banking features: loan request and approval system, transaction management, automated interest calculation, account creation, and balance update workflows, supporting both manual and programmatic inputs.
- Built modular UI using React and Tailwind CSS, including detailed user/account modals, loan repayment tracking, admin-level user control (add/update/delete), and integrated image uploads, achieving smooth and responsive user experience across all devices.

Farmify   Link
Python, Flask, TensorFlow, Scikit-learn, OpenCV, HTML, CSS, JavaScript, Bootstrap, SQLite, Firebase, EmailJS

- Designed and implemented "Farmify", a web-based AI solution targeting key agricultural challenges such as inefficient crop selection and undiagnosed plant diseases, leveraging both Machine Learning and Deep Learning techniques.
- Utilized a Random Forest Classifier trained on 2,200+ multi-parameter samples (soil nutrients, pH, temperature, humidity, rainfall) to deliver crop recommendations with 95% testing accuracy, boosting yield predictability and optimizing resource usage.
- Developed a CNN-based plant disease detection model with 90% accuracy, and integrated a YOLOv8-powered image analyzer and RAG chatbot (via HuggingFace API) for real-time, multilingual farmer assistance. Constructed using Flask, TensorFlow, scikit-learn, and JavaScript, ensuring scalability, data integrity, and user accessibility.

SoulTunes   Link
Python, OpenCV, TensorFlow, Keras, NumPy, Pandas, Jupyter Notebook, HTML, CSS, JavaScript, Flask, Haar Cascade, CNN

- Utilized a CNN model with 94.35% accuracy, trained on a dataset of over 70,000 facial expressions, to enable real-time emotion detection and improve music recommendation accuracy by 35%.
- Integrated facial recognition using OpenCV along with a real-time feedback mechanism to refine recommendations, resulting in a 30% increase in accuracy and improved overall user satisfaction.

Task Flow   Link
MongoDB, Express.js, JWT, Node.js, React.js, Redux, Tailwind CSS

- Created a full-stack task management app with user dashboards, priority tracking, and automated status updates, improving productivity by 30%.
- Streamlined team collaboration via multi-user task assignments, file attachments, and exportable reports, reducing manual coordination efforts.
- Delivered a responsive, intuitive UI with seamless cross-device performance, cutting bounce rates by 20% and enhancing user engagement.

Skills

- **Technical Skills:** *Java, Python, JavaScript, C++, MATLAB, HTML, CSS, Bootstrap, React, MySQL, SQL Plus, MongoDB, Express.js, Node.js*
- **Tools & Frameworks:** *Git, GitHub, Beautiful Soup, Selenium, Postman API, Machine Learning*

Certification

- Achieved HackerRank SQL (Intermediate) Skill Certification
- Full Stack (MERN) with MongoDB Certification (SmartBridge in partnership with MongoDB)
- Gen AI using IBM Watsonx (IBM Career Education Program)
- The Bits and Bytes of Computer Networking (Google, Coursera)
- Postman API Fundamentals Student Expert (Badge Earned)
- NPTEL Cloud Computing Course (IIT Kharagpur)
- NPTEL Marketing Analytics (IIT Kharagpur)
- MATLAB Onramp & Simulink Course (MATLAB)

Achievements

- Secured a global rank of 4685 in TCS CodeVita Season 12
- Earned 5-star Gold Badge in Java on HackerRank
- Participated in GirlScript Summer of Code 2024, contributing to open-source projects with 50+ code commits and collaborating with developers to enhance teamwork and refine software development practices.
- Navigated the complexities of more than 300 coding problems across diverse platforms like *GeeksforGeeks* and *LeetCode*, enhancing logical reasoning capabilities and reinforcing strong foundations in algorithms that drive effective programming solutions.