HARI RAM MACHI RAJU
S O F T W A R E   E N G I N E E R

📞 +91 7995307237

✉ rammachiraju2003@gmail.com

🏠 Kadapa, A.P, India

💼 http://www.linkedin.com/in/hariram-machiraju

Github: https://github.com/Machiraju2003

PROFESSIONAL OVERVIEW

Detail-oriented and analytical professional with strong problem-solving skills and a solid foundation in algorithms, data structures, and system design. Experienced in writing high-quality, well-documented code, evaluating AI model responses, and drawing insights from data. Effective communicator with a keen eye for software quality and performance.

PROJECTS

Multiple Artifact Detection Based on Adaptive Scalp Region Selection and Classifier Fusion

Machine Learning Algorithms (SVM, RF, NB, Voting classifier), Python, MNE – Python, NumPy, Pandas, Scikit – Learn, Matplotlib/Seaborn, Digital Signal Processing | Dec 2024 - Apr 2025

- Designed and implemented an ensemble machine learning model for EEG artifact detection using **Support Vector Machine (SVM)**, **Random Forest (RF)**, and **Naïve Bayes (NB).**
- Processed EEG signals using **MNE-Python**, focusing on channels like "EEG FP1-REF" for standardization and consistency.
- Applied **Z-score normalization and binary label encoding** for effective preprocessing and model training.
- Demonstrated improved robustness in real-time EEG artifact detection scenarios, making the model suitable for **brain-computer interfaces (BCIs)** and **clinical diagnostics**.

E – Learning Online Website || https://aadyagyan.netlify.app/

HTML, CSS, SCSS, Java Script | Feb 2025 – Mar 2025

Spearheaded the development of Aadya Gyan e-learning platform using HTML5, CSS3, SCSS, and JavaScript, implementing responsive design architecture that accommodated 10,000+ concurrent users, resulting in 40% increased mobile engagement, 60% reduction in load times, and 95% user satisfaction rating.

Personal Portfolio || https://rammfolio.netlify.app/

HTML, CSS, Java Script | Feb 2025 – Mar 2025

Engineered and deployed a professional portfolio website utilizing HTML, CSS, and JavaScript, featuring responsive UI architecture that improved mobile compatibility metrics by 40%. Implemented interactive navigation components, optimized frontend performance through efficient asset loading, and developed modular component structure ensuring enhanced maintainability and seamless cross-browser compatibility across multiple devices and platforms.

EDUCATION

Bachelor of Technology (E.C.E)
RGMCET, Nandyal, A.P
2021 – 2025   7.42 CGPA

Intermediate (M.P.C)
Sri gayatri Junior College, A.P
2019 – 2021   90.4 %

SKILLS

- Data structures and Algorithms
- Machine Learning
- Python
- Java
- C#
- Mango DB
- HTML
- CSS
- SCSS
- Bootstraps
- Java Script
- Vue.js
- MySQL
- React.js
- DOM Manipulation

Development Tools and Version Control:

- Git & GitHub
- VS Code
- Netlifv

CERTIFICATION

- Object-Oriented Programming with Python by Codio Learning Platform Professional.

- Front-End Development Certification by Great Learning Academy.

- Python Development Bootcamp by Let's Upgrade.

AWARDS

- **IEEE YESISIT12 2024 Preliminary Round Participant by RGMCET, Nandyal**
  Competed among 200+ participants in developing renewable energy solutions for sustainable power generation. Presented a hybrid wind solar energy system design with enhanced power efficiency, receiving recognition for innovative approach. Collaborated in a team of 4 to develop and implement the energy system prototype within a 48-hour timeframe.

- **Smart India Hackathon Participant**
  Participated in a national-level hackathon focused on sustainable energy solutions. Developed a wind-solar hybrid system prototype using IoT sensors for power optimization. Collaborated with a team of 4 to present a working model within 36 hours. Received positive feedback for the project's practical implementation and energy efficiency.

- **Chief Information Officer (CIO) by Student Activity Club (SAC) | RGMCET**
  Led digital transformation initiatives for a 1000+ member student organization, implementing new management systems that increased event participation by 40%. Managed a team of 5 coordinators to streamline club communications and data management across 5+ departments.