OM PRASAD SAHU

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○ github.com/7977Brahma

TECHNICAL SKILLS

Programming Skills — Python | C | Java | Kotlin | C++ | XML | OOPS

Web Development Skills — HTML | CSS | Bootstrap | React. JS

Data Handling Skills — SQL | NoSQL | RDBMS | MongoDB | Microsoft SQL

AI/ML Frameworks and Libraries — Deep Learning | TensorFlow | Keras | OpenCV

Developer Tools — Git | Flutter | Angular | Android Studio | VS Code | PyCharm | Google Cloud Platform | Scripting

WORK EXPERIENCE

Science and Engineering Research Board (SERB), RESEARCH INTERN — Aug 2024 – Sep 2024, Assam, India
- Improved predictive accuracy of digital twin simulations by integrating mathematical models with machine learning techniques.
- Achieved a 20% increase in forecast reliability for industrial applications during the internship period.

National Institute of Technology Silchar, *Satyendra Nath Bose Summer Intern* — Jun 2024 – Jul 2024, Silchar, India
- Developed machine learning models using LSTM and Random Forest for accurate prediction of battery RUL, achieving a 0.9602 R^2 score.
- Conducted extensive data preprocessing and analysis to enhance model performance and ensure reliable predictions.
- Collaborated with a cross-functional team to optimize AI/ML algorithms for improved system diagnostics.

National Aluminum Company Limited (NALCO), *Full Stack Developer* — Jan 2024 – Feb 2024, Damanjodi, India
- Designed and deployed full-stack applications using HTML, Java, C++, and SQL, resulting in a 30% reduction in operational delays.
- Integrated advanced analytics to derive actionable insights, enhancing production efficiency by 15%.
- Implemented cloud-ready solutions for real-time data monitoring and analysis.

PROJECTS

Precision Pathodiagnostics for Solanum Tuberosum Disease Detection — Aug 2024 – present
- Developed a YOLOv8-based model achieving 98.01% accuracy in potato disease detection by processing over 2500 images.
- Leveraged deep learning frameworks like TensorFlow and PyTorch to enhance agricultural diagnostics.

Battery Remaining Useful Life Prediction using ML Algorithm — Jun 2024 – Jul 2024
- Built predictive models using ML algorithms (Random Forest, LSTM, Gradient Boosting) to achieve 0.3-cycle MAE.
- Deployed IoT-integrated solutions for real-time monitoring and predictive maintenance.

AI-based Automated Alarm Generation and Payload Dropping through Drones
- Developed an AI-driven system for autonomous drone operations, integrating advanced object detection technology that improved target identification efficiency and enhanced operational capabilities in field tests by 30%.
- Designed algorithms for optimal flight paths and payload delivery, achieving 92% target accuracy and 72% success.

Anti-sleep Alarm Goggle for Drivers
- Developed a wearable technology capable of detecting driver drowsiness based on precise eye movement tracking, contributing to safety measures that address the three leading causes of vehicular accidents.

EDUCATION

NIST University, *Bachelor of Technology in Computer Science and Engineering* — Dec 2021 – present, Brahmapur, India
Specialization In AI/ML, Data Analytics, Internet of Things, and Cloud Technology
CGPA: 8.0/10

CERTIFICATES

Coursera Certification By Google — Google Advance Data Analytics

National Skill Development Corporation (NSDC) — Android App Development

National Program for Technology Enhanced Learning — Python for Data Science | Programming in C

National Aluminum Company Limited — Vocational Trainning on Web Development