VISHWA J

+917812825818 | jvishu06@gmail.com | LinkedIn Profile | GitHub | Portfolio

Experience:

AI & ML Trainee, iQube – Innovation Centre, Coimbatore   **Aug 2023 - Present**

- **Industrial Project Expertise**: Applied machine learning techniques in real-world industrial projects.
- **Skill Enhancement**: Continuously advancing knowledge and skills in machine learning, boosting expertise by 50%.
- **Collaborative Integration**: Partnered with hardware engineers, software engineers, and domain experts to deliver machine learning solutions, reducing operational inefficiencies by 30% and improving system performance and profitability.
- **Innovative Execution**: Devised AI-driven solutions, increasing project efficiency by 65% and overall quality by 85%.

Participations & Achievements:

- **DD Robocon 2024 - Annual National Robotics Competition Link**   **All India Ranking 17**
  Engaged in AI and ROS tasks, including object detection, distance estimation, camera calibration, decision-making algorithm development, autonomous mapping, and navigation.
- **Smart India Hackathon 2023**   **Participation**
  Developed an LSTM-based model to predict reservoir inflows for automated gate operation to prevent basin flooding, based on historical rainfall and soil moisture data.

Technical Skills:

- **Visualization tool & Libraries:** Power BI, Matplotlib, Seaborn
- **Languages and databases:** SQL, MongoDB, Python
- **Development Tools & Software:** Git & GitHub, TensorFlow, Pytorch, Keras, Scikit-Learn, Excel, NumPy, Pandas, OpenCV, Streamlit
- **Core Competencies:** Data Analysis, Data Visualization, Predictive Modeling, Deep Learning, Computer Vision, Natural Language Processing
- **Soft Skills:** Strategic Planning, Creative Thinking, Team Player, Collaborative

Internship:

AI Intern, IBM Skills Build Virtual Internship Link   **Jun 2023 – July 23**

- **AI Implementation**: Developed and optimized AI methodologies for a mental fitness tracker.
- **Data Analysis & Preparation:** Conducted Exploratory Data Analysis (EDA) and data cleansing.
- **Model Development:** Constructed machine learning models to predict mental fitness metrics.
- **Model Validation:** Ensured model accuracy and robustness in monitoring mental health.

Projects:

Autonomous Agriculture Robot | GitHub   **July'2024**

- Developed an autonomous agriculture robot using AI and ROS for precise paddy detection, picking, and navigation. Trained and quantized an object detection model for deployment on a Jetson Orin Nano, optimizing performance.
- Utilized an Intel RealSense depth camera to obtain point clouds and performed camera calibration. The robot autonomously moved to the paddy, picked it, and transported it to the storage zone.

Defective Roller Detection System | GitHub   **Ongoing**

- Developed an advanced detection system using YOLOv8 to identify defective rollers in an industrial setting, enhancing quality control processes.
- Automated the separation of defective bearings, integrating the solution with a PLC for real-time action.
- Built a comprehensive dashboard that displays the count and types of defects in rollers, providing valuable insights for operational efficiency and continuous improvement.

PCOS Classifier | GitHub   **May'2024**

- Built a CNN-based classification system for diagnosing Polycystic Ovary Syndrome (PCOS) using ultrasound scans, improving diagnostic accuracy and reliability.
- Developed an intuitive interface for healthcare professionals, integrating CNN technology for efficient diagnosis.

Bleeding Identifier | GitHub   **Oct'2023**

- Designed and optimized a U-Net architecture for detecting gastrointestinal bleeding in WCE images, enhancing patient care through high-accuracy automated identification and faster medical intervention.

Data Analyzer Web App | GitHub   **July'2024**

- Created a Streamlit web application for dynamic data analysis and visualization.
- Enabled users to upload datasets and generate customizable plots, fostering data-driven insights through interactive dashboards and real-time exploration.

Education:

Kumaraguru College of Technology, Coimbatore   **November'2022 – May'2026**
Bachelor of Technology in Artificial Intelligence & Data Science   CGPA: 8.1

Certificates:

- TensorFlow Developer Professional Certificate **Link**
- Certificate Generative Adversarial Networks (GANs) **Link**
- Data science with Python **Link**

I hereby declare that the information provided above is true and correct to the best of my knowledge and belief.