Subhrajyoti Nath

Senior Manager

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9437717877

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Highly Motivated professional well-versed in process data mining, statistical modeling, data visualization with strong analytical and problem-solving skills. Proactively seeking for analyst roles to assume more challenging roles that would enhance exposure and learning

Skills

- PYTHON

●●●●○
Very Good

- SQL

●●●●●
Excellent

- POWER Bi

●●●●○
Very Good

- MICROSOFT EXCEL

●●●●○
Very Good

- PLC PROGRAMMING & SCADA

●●●●●
Excellent

- WEB DEVELOPMENT

●●●●○
Very Good

- NODE-RED

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Good

Work History

2023-01 – current

Senior Manager

Machine Learning and Data Analyst Engineer, AE ERC , Jamshedpur, India

ROLES & RESPONSIBILITIES:

- Responsible for analyzing vehicle data coming from field and generate report for feature extraction & abnormalities detection.
- Development of Battery Digital Twin through physics and data driven modelling.

2020-09 – 2023-01

Senior Manager

Electronics, Central Maintenance, Tata Motors, Jamshedpur, India

ROLES & RESPONSIBILITIES:

- Responsible for Preventive Maintenance, Daily Maintenance and Breakdown management of Control Systems

- Cost Saving of **25 lakhs** through Internal and External Repairs
- Enhancing safety, productivity quality through **Introduction of Digital solutions**

MAJOR PROJECTS UNDERTAKEN:

Autonomous Material Handling Robot using ROS:

- Developed and validated the hardware for material feeding and empty trolley fetching in the trim line.
- Implemented autonomous navigation using Python code in ROS, enabling the robot to move to the desired location without human intervention.
- Integrated safety features, including collision avoidance, to ensure the safety of the robot and the workers.
- Developed a monitoring and controlling system for the robot, enabling remote access and control of the robot's functions.
- Collaborated with cross-functional teams to ensure smooth integration of the robot into the production line.
- Conducted extensive testing and validation to ensure the reliability and accuracy of the robot's operations.
- Documented the project, including hardware specifications, software code, and user manuals, ensuring easy access to information for future reference.

Industry 4.0 Online Process Control & Traceability Initiative for Cab & Cowl Tracking and Tracing in BIW Factory:

- Conducted a 4W1H analysis to execute the Plan-Do-Check-Act (PDCA) project, resulting in improved productivity and quality.
- Developed a unique barcode system that utilizes Visual Basic Scripting (VBS) and SQL to map various parts aggregated into the cab and cowl.
- Integrated process parameters with the generated barcodes using SQL stored procedures, enabling real-time tracking and traceability of the parts.
- Created a real-time Power BI dashboard that monitors the production process and alerts the team to any spot quality issues, ensuring prompt resolution of problems.
- **Redesigned the Profibus network to eliminate bus-related communication faults:**
- Conducted a comprehensive analysis of the entire Profibus system and signal strength using ProfiTrace software, identifying the root cause of communication faults.
- Led the team in developing and implementing a star-based topology to improve diagnostics and fault detection, effectively eliminating Profibus-related issues.
- Demonstrated exceptional leadership by upgrading the network during non-production hours while adhering to production schedules, resulting in uninterrupted production.

- Recognized with a **Gold-Team award** by senior management for outstanding leadership and successful network upgrade.
- **Developed a VFD network system for parameter monitoring and preventive maintenance:**
- Utilized NODE-RED to acquire data through MOD-BUS protocol, enabling real-time data collection from the VFD network system.
- Stored data in Relational Databases (MS SQL), allowing for easy data management and access.
- Developed a real-time monitoring dashboard using DASH frame-work for parameter monitoring and preventive maintenance, providing valuable insights into the VFD network system's performance and enabling prompt action to be taken when necessary.

2019-08 - 2020-05

Graduate Engineer Trainee

Tata Motors, Jamshedpur, India

Fleet Management Services, New Delhi

- Performed analytical study of field failure issues and developed cost effective solutions which led to a cost saving of 5 lakhs per annum
- Worked extensively on MS Excel, Power BI

Machine Learning Aided In House Development of Dry Film Thickness Prediction system

- Worked closely with paint factory team in understanding customer needs there by providing them a cost-effective solution through development of DFT prediction system by incorporating predictive analysis
- Worked extensively on Python (Machine Learning) libraries such as NumPy, pandas, matplotlib, seaborn, Scikit-learn etc.,
- Successfully contributed to the improvement of DRR by 10%

Education

2015-07 - 2019-05

B. Tech: Electrical Engineering

National Institute of Technology - Rourkela

2013-07 - 2015-05

Higher Secondary: M.P.C

Excelsior +2 Science College - Jajpur

Certifications

2021-10
- TIA PORTAL MASTER PROJECT-Udemy

2021-09
- The Complete SQL Boot Camp-Udemy

2022-03
- The Complete Python Boot Camp -Udemy

2022-05
- Short term Course on Machine Vision for Robotic Applications in Manufacturing at COEAMT of IIT Kharagpur

2022-06
- Python for Data Science and Machine Learning Boot Camp

Accomplishments

- **Gold-Team Award by Plant Head Jamshedpur** for Driving Execution of Network Upgradation
- **Silver-Team Award by Head HR Jamshedpur** for productivity improvement of security Division through Low-Cost Automation
- Secured 2nd Position in **Embetronix** event Organized by IIT Kharagpur in Kshitij-The Biggest Technical Fest
- Awarded Patani Samanta Mathematics Talent Scholarship
- Awarded NMIMS Scholarship by Central Government of India