

# Biswajit Sahu

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**About Me:** VP RnD | Industrial IoT Expert | PCB Designer | Product Engineer



## Profile

An IT and IIOT passionate about software and IOT developments. I have experience in working with multiple teams on a wide range of tech stack on different stages during which i ended up learning them all.



## Work Experience

09/2022 – PRESENT

### Vice President - RnD Knowledge Lens Pvt. Ltd .

- Spearheaded a team of 5 hardware developers in the design and development of innovative IOT-based hardware modules.
- Successfully conceptualized and executed 8 new hardware products tailored to meet diverse Industrial IOT requirements.
- Designed and implemented industrial communication networks, including Ethernet, Fiber Optic, RS485, RS232, HART, and 4-20mA analog signals, to ensure seamless on-site implementation.
- Led the design and development of state-of-the-art Robotic Inspection Systems for multiple esteemed clients.

08/2019 – 09/2022

### RnD Lead, Senior Technology Specialist Knowledge Lens Pvt Ltd

- I was leading the development of a cutting-edge IIOT Platform utilizing Azure IoT and AWS IoT, enabling industries to effectively achieve their Industrial 4.0 objectives.
- Designed and developed a dynamic portal for seamless IoT device management from the cloud, enhancing operational efficiency for clients.
- Demonstrated expertise in developing firmware for IoT devices, ensuring optimal functionality and performance.



## Work Experience

11/2015 – 08/2019

### Software Developer Knowledge Lens Pvt Ltd

- Led a team of 8 in the design and development of a national-level real-time data monitoring portal for the Government of India.
- Developed software modules using Python for IoT devices.
- Decoded device communication protocols and crafted device drivers.



## Strengths

# Leadership # Innovation # Strategy  
# Collaboration # Communication  
# Problem-solving # Networking



## Achievements

### Filed a Patent

- Filed a patent application under file number 2023P-101-US for the innovative IT-OT Security hardware (Data Diode) allowing seamless communication between sender and receiver through digital pulse signals



## Certificates

01/2024

### Azure Fundamentals AZ-900 Microsoft



## Major Projects

09/2023 – 12/2023

### RSS - Robotics Surveillance System

- Implemented and developed an advanced online platform featuring cutting-edge AR/VR technology for enhanced user experience.
- Designed and programmed a robust system to assign missions and tasks to multiple surveillance robots.
- Leveraged high-quality images captured during surveillance to intelligently assign tasks to robots.

07/2022 – 08/2023

### iLens AVIS - A Vision Inspection Robot

- Developed and implemented AVIS, an innovative **Automatic Visual Inspection System** utilizing a Gantry based robot to conduct meticulous visual inspections on various objects.
- Applied advanced Image Processing to effectively identify defects in products by diligently examining their shape and size.

03/2020 – 08/2022

### iLens IOT Products

- Developed four types of Dataloggers tailored to meet the distinct requirements of the Indian market, utilizing ESP32 Microcontroller and Raspberry PI based Microprocessor.
- Successfully executed the major task of collecting data from diverse industrial equipment and seamlessly uploading it to the cloud.
- Designed and constructed an AI Enabled IP67 Rated Camera to address the demand for distributed real-time video processing in industries.
- Implemented camera technology for item counting in production batches and detection of defects on products.
- Engineered two models of DataDiole System ensuring the secure, uni-directional flow of data, enhancing IT-OT security for industries which enabled them to send realtime OT data into Cloud.

10/2017 – 12/2018

### CPCB CCR - A Govt of India Project

- Developed and implemented a cutting-edge platform for real-time monitoring of pollution levels across India
- Utilized over 1000 air quality monitoring stations to collect and upload data every 15 minutes, ensuring comprehensive coverage
- Generated accurate and up-to-date Air Quality Index (AQI) reports for various cities in India, effectively communicating pollution levels
- Created and managed a user-friendly complaint management application, enabling users to report air-related incidents promptly and automatically assign to the nearest officials.



## Technical Skills

### ~ PROGRAMMING LANGUAGES

Python	Professional
C, C++	Professional
Java	Limited
HTML, Javascript	Limited

### ~ DATABASE

MongoDB	Professional
SQL	Professional
KairosDB	Professional
Apache Kafka	Professional
Elasticsearch	Limited

### ~ SYSTEM & NETWORKING

GitLab	Professional
CI/CD Pipelines	Professional
Unix/Linux Systems	Professional
Nginx	Professional
Network Administration	Professional
Virtualization	Limited

### ~ COMMUNICATION PROTOCOLS

Modbus	Professional
OPC UA/DA	Professional
AB - Ethernet/IP	Professional
Profinet	Limited
MQTT	Professional

### ~ IOT STACK

Arduino, ESP32	Professional
Raspberry PI	Professional
AWS IoT	Professional
Azure IoT	Professional



## Education

08/2011 – 04/2015

### Computer Science and Engineering | BTech

Biju Patnaik University of Technology



## Hobbies



Capturing moments



Gaming



Badminton



DIY



Home Automation



IOT