

# Satya Maharjan

## Research & Development Manager | AI/ML • Systems • Cloud

■ Nepal | ■ maharjan.satya@gmail.com | LinkedIn: satya-maharjan-9bb61a47 | GitHub: msatyanp

### *Professional Summary*

Senior technology leader with nearly 20 years of experience spanning ISP-scale infrastructure, enterprise IT, and AI/ML-driven research & development. Proven expertise in designing high-traffic, mission-critical platforms by combining deep systems knowledge with modern AI, backend engineering, and cloud-native architectures. Strong mentor and hands-on leader driving research into production-ready solutions.

### *Core Expertise*

- Artificial Intelligence & Machine Learning (LLMs, YOLOv8, Computer Vision)
- Backend Engineering, System Design & Architecture
- Kubernetes, Docker, Cloud & DevOps Practices
- High-Traffic Platform Optimization (Magento, Elasticsearch, Nginx, Varnish)
- Observability, Reliability & Performance Engineering
- IoT & Home Automation (Raspberry Pi, ESP32, NodeMCU, UWB)

### *Professional Experience*

#### **Research & Development Manager – Javra Software** (Feb 2022 – Present)

Lead AI/ML research, experimentation, and production deployments. Architect scalable, high-traffic systems and mentor engineers in AI/ML, backend engineering, and system design. Bridge research outcomes with real-world business and industrial use cases.

#### **IT Manager – Javra Software** (Oct 2015 – Feb 2022)

Managed enterprise IT infrastructure, backend platforms, and operational reliability. Implemented monitoring, automation, security policies, and performance optimizations across critical systems.

#### **Senior System Administrator – WorldLink Communication** (Feb 2006 – Sep 2015)

Designed, deployed, and secured ISP-scale Linux & Windows environments. Managed DNS, DHCP, mail servers, firewalls, bandwidth management, and 24x7 operations ensuring high availability.

### *Key Projects & Achievements*

- YOLOv8-based object detection system achieving up to 100% accuracy on tubers and 97% on clouds
- Secondary AI pipeline for object size classification for industrial grading use cases
- High-traffic multi-country Magento platform tuning (Elasticsearch JVM, PHP-FPM, Nginx, Varnish)
- k6-based load testing frameworks with Azure cost & capacity optimization reports
- IoT & home automation systems using Raspberry Pi, ESP32, MQTT, and edge computing

### *Education*

Bachelor of Engineering (Computer Engineering) – Kathmandu Engineering College, Tribhuvan University

### ***Online Presence***

- LinkedIn: <https://www.linkedin.com/in/satya-maharjan-9bb61a47/>
- GitHub: <https://github.com/msatyanp>
- Facebook: <https://www.facebook.com/hungrysurfer>
- Instagram: [https://www.instagram.com/satya\\_mah/](https://www.instagram.com/satya_mah/)