

# SWAPNIL PANDE

Technical Lead | Solutions Architect | AI/ML Engineer

✉ [swapnilbipinpande@gmail.com](mailto:swapnilbipinpande@gmail.com) | ☎ +91 9769534547 | 📍 Nagpur, Maharashtra

🏆 Google AI Certified Leader | ★ Consistently High Performer at TCS

## PROFESSIONAL SUMMARY

**Technology Leader** with **14+ years** of experience architecting enterprise-scale solutions and leading high-performing teams. Currently managing **30+ associates** at TCS, specializing in **IoT-based Supply Chain & Logistics Automation**. Proven expertise in **Spring Boot microservices architecture, AI/ML implementation**, and **modern full-stack development**. Successfully reduced Vehicle Turn Around Time by **70%** through innovative technical solutions.

**Core Expertise:** Enterprise Architecture | Team Leadership | AI/ML Integration | Spring Boot | React | IoT Solutions

## TECHNICAL EXPERTISE

### Architecture & Leadership

- **Microservices Architecture** with Spring Boot, Service Discovery, API Gateway
- **Team Leadership** (30+ associates) | Technical Mentoring | Solution Design
- **Cloud Platforms:** Google Cloud Platform (GCP), Vertex AI
- **Enterprise Integration:** REST/JMS, Message Queues, Token-based Authorization

### AI/ML & Modern Technologies

- **AI/ML Frameworks:** Vertex AI, Gemini API, RAG (Retrieval-Augmented Generation)
- **Frontend:** React 19, HTML5, CSS3, JavaScript ES6+
- **Backend:** Spring Boot, Nest.js, Java, Node.js
- **Development Tools:** Cursor IDE, GitHub Copilot, Eclipse, Visual Studio Code

## Data & Integration

- **Databases:** Oracle (9i-12c), PostgreSQL, MS SQL Server
- **Analytics:** ELK Stack (Elasticsearch, Logstash, Kibana)
- **Reporting:** Jasper Reports, Business Intelligence
- **IoT & Sensors:** Vehicle Tracking, Plant Automation, Supply Chain Monitoring

## PROFESSIONAL EXPERIENCE

### Assistant Consultant (Technical Lead/Architect)

**Tata Consultancy Services Ltd., Nagpur** | *March 2011 – Present*

### Current Role: IoT Solutions Architect & Team Lead

*January 2015 – Present*

#### Leadership & Architecture:

- **Lead a team of 32 associates** across new implementations and enhancement projects
- **Design complete technical architecture** for IoT-based Supply Chain & Logistics solutions
- **Architect Spring Boot microservices** handling 200K+ daily transactions for thousands of concurrent users
- **Implement service discovery, authorization mechanisms, and message queue architectures**

#### Key Projects & Clients:

- **Hindustan Zinc Ltd, Vedanta Aluminium, Birla Corporation Ltd**
- **Technologies:** Spring Boot, React, JSF 2, PrimeFaces 6, JavaScript, Ajax, jQuery, JSON, Apache Tomcat
- **Achievement: Reduced Vehicle Turn Around Time by 70%** through automated tracking and validation systems

#### AI/ML Initiatives:

- **Developed L1 Support Chatbot** using Gemini API with RAG-based document processing

- **Built Exception Analysis Module** integrated with ELK Stack and Gemini API for automated issue resolution
- **Created multilingual chatbot** improving customer support efficiency and user experience
- **Deployed Vertex AI models** (text and RAG models) for business process automation

## **Banking Solutions Developer & Team Lead**

*August 2011 – November 2014*

**Project:** Audit Report Processing System (ARPS) for **State Bank of India**

- **Led full-stack development** of online application with comprehensive reporting module
- **Technologies:** J2EE (Struts 1.2), Oracle 10g, Jasper Reports, HTML, XML, JavaScript, jQuery, Ajax
- **Delivered scalable and flexible system** adaptable for multiple banking applications

### **Current Responsibilities:**

- **Client Interaction** for requirements analysis and solution design
- **Performance Optimization** and coding standards implementation
- **Technical Documentation:** Approach Notes, Effort Estimations, User Manuals
- **Quality Assurance** ensuring high-quality deliverables within timelines
- **Knowledge Sharing** through regular technical training sessions

## **RECENT PROJECTS & INNOVATIONS**

### **Manufacturing Plant Monitoring Portal**

- **Technology Stack:** React 19, Spring Boot, REST APIs
- **Scope:** Real-time plant operations monitoring with interactive dashboards

### **Issue Tracker Portal**



- **Technology Stack:** Nest.js, Express.js, Node.js
- **Features:** Automated issue categorization and resolution tracking

## AI-Powered Support Systems

- **Gemini API Integration** for intelligent customer support
- **RAG Implementation** for document-based query resolution
- **ELK Stack Analytics** for predictive issue resolution

## CERTIFICATIONS & ACHIEVEMENTS

### Professional Certifications

-  **Google AI Certified Leader**
-  **TCS Contextual Master Certification**

### Awards & Recognition

- **7 Consecutive 'A' Band Performance** ratings (2018-2024)
- **Multiple Customer Recognition Awards**
- **Star of the Month & Star of the Quarter** recipient
- **Technical Excellence Awards** within TCS organization

## EDUCATION

### **Bachelor of Engineering (B.E.) | 2010**

J.D.I.E.T. Engineering College, Yavatmal, Maharashtra







*Aggregate: 64.4%*

### **Higher Secondary Certificate (H.S.C.) | 2006**

A.M.V.S College, Yavatmal, Maharashtra

*Percentage: 79.9%*

## KEY ACHIEVEMENTS & METRICS

-  **Led 32-member technical team** across multiple client engagements
-  **Reduced Vehicle Turn Around Time by 70%** through IoT automation
-  **Process 200K+ daily API transactions** with high availability
-  **Mentored 50+ junior developers** in modern technologies
-  **Maintained 7-year consecutive 'A' performance** rating
-  **Implemented AI solutions** reducing manual support efforts by 40%

## TECHNICAL SKILLS MATRIX

Category	Technologies	Experience
Programming Languages	Java, JavaScript, TypeScript, Python	14+ years
Frameworks	Spring Boot, React 19,, Nest.js	8+ years
Architecture	Microservices, REST APIs, Service Discovery	10+ years
AI/ML	Vertex AI, Gemini API, RAG, ELK Stack	2+ years
Databases	Oracle, PostgreSQL, MS SQL Server	14+ years
Cloud Platforms	Google Cloud Platform (GCP)	3+ years
Development Tools	Cursor IDE, GitHub Copilot, Eclipse, Git	5+ years

*Available for **Technical Lead and Solutions Architect** roles preferably in **Supply Chain and IoT** domains*