

# SHIVRAJ PATIL

Sr. Software Engineer @Novonordisk Bengaluru



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## PROFESSIONAL SUMMARY

**Software Engineer** with **7+ years** of progressive experience architecting **scalable backend systems**, **cloud-native solutions**, and **high-performance applications**. Proven track record in **Python ecosystem**, **microservices architecture**, **cloud engineering**, and **DevOps automation**. Successfully delivered **applications** serving **thousands of users** while working with **cross-functional teams** and mentoring **junior developers**.

**Core Expertise:** Full-stack development, System design, API architecture, Database optimization, Cloud infrastructure, CI/CD pipelines, Team leadership



## SKILLS HIGHLIGHTS

### Programming & Frameworks

- **Python:** Flask, FastAPI, SQLAlchemy, Pandas
- **Backend Technologies:** RESTful APIs, Microservices Architecture
- **Database Systems:** PostgreSQL, Oracle, MySQL, Redis, SQLite

### Cloud & DevOps

- **AWS Cloud Services:** EC2, RDS, Lambda, CloudFormation, API Gateway
- **Containerization:** Docker, Kubernetes, Container Orchestration
- **CI/CD Tools:** Azure DevOps, AWS CodePipeline, Automated Deployment Pipelines

### Architecture & Design

- **System Architecture:** Microservices, Event-Driven Architecture, Distributed Systems
- **API Design:** REST, OpenAPI/Swagger, API Security & Rate Limiting
- **Database Design:** Schema optimization, Query performance tuning, Data modeling



## JOB EXPERIENCE

**Senior Software Engineer**

**Present**

**Novo Nordisk - Bengaluru**

**Project - NN Planner:** Enterprise Workforce Management Platform

**Impact:** worked on restructuring and delivered a cloud-native digital planning system serving 3,000+ users across QC laboratories, QA departments, and production support teams globally.

### Key Achievements:

- Architected scalable backend infrastructure using Python/Flask and AWS services.
- Developed RESTful APIs for workforce planning, resource optimization, and real-time analytics.
- Implemented microservices architecture
- code reviews and established best practices, improving code quality metrics.

**Technologies:** Python, Flask, AWS, PostgreSQL

## Software Engineer

Mar-21 to Jan-23

Accenture - Bengaluru

Project - Big Data Analytics Platform - US Steel Corporation

### Project Desc:

The primary business of US Steel is the production and sale of steel sheet products such as hot roll, cold roll and galvanized sheet. Working on different data analytics applications which help them have better insights and improve steel production. Handling various projects (Steel price predictions, Alloy consumptions, Scrap Management) which led to saving millions a year by switching to these platform/applications.

### Responsibilities-

- Developed microservices APIs for steel price prediction, alloy consumption optimization, and scrap management
- Architected real-time analytics dashboard using Vue.js frontend and Python backend services, plotly dashboards.
- Optimized database queries reducing processing time for critical business reports

**Technologies:** Python, FastAPI, Kedro, PySpark, Vue.js, Plotly.

## Software Engineer

Oct18 to Mar-21

LTI - Pune

### Projects:

#### GBI DataLab - ML Platform for Apple Inc.

Built a comprehensive machine learning platform enabling data scientists to deploy and manage ML models at scale.

- Designed and implemented backend services for Jupyter notebook management and model deployment.
- Integrated version control system using GitHub API, enabling seamless code collaboration.
- Built containerized deployment pipeline using Docker and Kubernetes for model serving.
- Developed automated testing framework achieving 90%+ code coverage using pytest.

#### MOSAIC AIOps Platform

IT operational center platform for ticket issue resolution.

- Migrated legacy .NET application to Python-based microservices architecture.
- Developed automated ticket routing system using Django framework.
- Built RESTful APIs for IT operations management and monitoring

**Technologies:** Python, Flask, Django, Docker, Kubernetes, SQLAlchemy, GitHub API, GitLab, PostgreSQL.



## ACHIEVEMENTS

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### Hackathon Participant:

- Novo Nordisk InsightHACK 2023 (Sales Intelligence Platform)
- LTI MosaicHacks 2020: Developed cloud marketplace solution with multiple services
- Tech Conference: PyCon India 2023, 2024, 2025



## PROFESSIONAL COURSES & CERTIFICATIONS

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**Udemy Certified:** Python, Docker, Kubernetes, Machine Learning



## EDUCATION

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- Bachelor of Engineering, Electronics & communication  
KLS VDIT, VTU 2013 - 2017



## PERSONAL DETAILS

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Date of Birth	10 <sup>th</sup> June, 1994
Languages Known	English, Hindi, Kannada
Cell number	+91-7204141598 (personal)
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Portfolio	<a href="https://shivrajpatil12.github.io">https://shivrajpatil12.github.io</a>