Pravin Kumar

Bengaluru · contact@pravin-pk.in · +91 9108139960 · www.pravin-pk.in

Education

BITS Pilani - Work Integrated Learning Program — Bengaluru
M. Tech Software Engineering *GPA: 7.3* — Sept 2023 - Jun 2025

Experience

SAP Digital Manufacturing Cloud, SAP Labs India — Bengaluru
Associate Developer — Sept 2023 - Present

- Led migration of 10+ microservices from Cloud Foundry to Kubernetes, enhancing scalability and reducing deployment time by 30%.
- Optimized API performance using Dynatrace for monitoring and debugging, identifying and resolving bottlenecks in real-time production environments.
- Developed and deployed a microservice with 20+ RESTful APIs using NestJS framework, serving 70K+ daily requests across manufacturing execution and shop-floor integration modules.
- Implemented Kafka-based event streaming and data caching mechanisms, ensuring data consistency across cloud and edge systems with zero downtime during sync operations.
- Integrated Temporal workflows for master data synchronization across microservices.
- Configured Horizontal Pod Autoscaler (HPA) and Kubernetes Event-driven Autoscaling (KEDA) for Kubernetes pods, improving resource utilization and handling peak loads efficiently.
- Automated repetitive tasks with Bash shell scripts, saving the team 10+ hours per week in operational overhead.

Zilliot Technologies — Mangaluru
Intern — Aug 2022 - Mar 2023

- Conducted R&D on data collection pipelines and built ML regression models, processing datasets of 1,00,000+ records to predict outcomes with 85% accuracy.
- Designed and implemented RESTful APIs using Django framework, supporting seamless integration for IoT and Cloud applications.
- Deployed and monitored applications on Google Cloud Platform (GCP), utilizing tools like Grafana for real-time metrics and ensuring 99.9% uptime.
- Aggregated and stored IoT device data in cloud databases, handling high-volume streams to support scalable analytics.

Skills

Programming Languages:	Java, Typescript, Python, Go, C++, SQL, Bash
Frameworks & Libraries:	Java Springboot, NestJS, Flask, Django, React, Angular, ExpressJS
Tools & Technologies:	Kubernetes, Grafana, ELK Stack, Dynatrace, Kafka, Temporal, Jest, OpenCV
Others:	Microservices Architecture, Cloud Computing, DevOps, Machine Learning, IoT

Publication

Pay-by-Palm: A Contactless Payment System — Published in Springer Proceedings (DOI: 10.1007/978-981-99-9521-9_25)
Engineered a secure payment system integrating palmprint recognition with e-wallets, addressing accuracy, reliability, and privacy challenges to deliver enhanced user experience and fraud-resistant transactions.

Projects

Archivo - Student File Management System *Django (Python), SQLite*
https://github.com/pravin-pk/Archivo
A full-stack web application using Django (Python) with SQLite database to streamline management of student academic records and documents. Implemented secure user authentication, file upload/download functionality, document organization, and role-based administrative controls for students, faculty, and admins.

TIARA 2023 *Django, React, Google Cloud Platform, REST APIs, NoSQL, RazorPay*
https://github.com/pravin-pk/Tiara-2023
Led a cross-functional team of 5 developers to build a full-stack web application, incorporating event listings, e-ticket booking with integrated payments, and automated email notifications, serving 1,000+ users and generating 500+ transactions during the event.