

# AJAY KUMAR

Bengaluru, India

☎ +918433130068

✉ [akpanchal099@gmail.com](mailto:akpanchal099@gmail.com)

🌐 [LinkedIn](#)

🐙 [Github](#)

🔗 [LeetCode](#)

🌐 [Website](#)

## SUMMARY

---

Backend Engineer with 3+ years of experience in distributed systems and cloud-native solutions, with expertise in building high-performance APIs, optimizing databases, and designing fault-tolerant microservices. Proven track record of solving complex infrastructure challenges using Java, Spring Boot, and AWS. Passionate about system efficiency, automation, and scalable architecture.

## EXPERIENCE

---

### Palo Alto Networks, Inc.

Aug 2022 – Present

*Staff Software Engineer*

*Bengaluru, India*

- Performance Optimization: Implemented dynamic memory allocation algorithms in Python and Java, reducing OOM errors by 80% across 10K+ edge devices
- Fault Tolerance: Architected a tunnel management system using Python and C, enabling automated failover for critical infrastructure (reduced downtime by 40%).
- Device Registration Automation: Streamlined the registration of 10K+ devices to the license server, reducing manual effort by 60% and improving compliance through API-driven automation.

### Amazon India Pvt. Ltd.

Jan 2022 – Jun 2022

*SDE Intern*

*Bengaluru, India*

- Real-Time Alert System: AWS Lambda functions to process CloudWatch metrics, triggering alerts for 50+ SKU error types.
- Data Visualization Pipeline: Built ETL workflow using Kinesis Firehose and QuickSight, reducing report generation time by 20%
- Operational Dashboards: Developed SQL queries to track system health metrics, used daily by 15+ operations team members.

### MAQ Software

Mar 2021 – Dec 2021

*Associate Software Engineer*

*Mumbai, India*

- Power BI System Migration: Converted 10+ Tableau dashboards to Power BI using optimized SQL queries, reducing load times by 40%.
- Client Reporting: Created dynamic Power BI templates used by Fortune 500 clients for supply chain analytics.
- Query Optimization: Reduced stored procedure execution time by 35% through index tuning and query plan analysis for Azure Synapse Migration Project

## EDUCATION

---

### B.Tech in Computer Science and Engineering

Jul 2018 – Jun 2022

*Lovely Professional University - LPU, Punjab, India*

*GPA: 8.04/10*

### XII with PCM

Jul 2016 – Jun 2017

*Jawahar Navodaya Vidyalaya, UP, India*

*Percentage: 92.2%*

## SKILLS

---

Java, Spring Boot, Python, C++, HTML/CSS/JavaScript, MySQL, MongoDB, AWS (EC2, S3, Lambda, CloudWatch), Docker, Microservices Architecture, RESTful APIs, OOPs principles, Distributed Systems, Git, CI/CD pipelines