KARTIK PAGEY

+1 (732) 589-6422 | kartik.pagey.dev@gmail.com | linkedin.com/kartik-pagey | github.com/bugfree-kartik | Portfolio

PROFESSIONAL SUMMARY

Software Engineer with more than 3 years building scalable distributed systems using Java, Spring Boot, and AWS. Demonstrated ownership of the complete service lifecycle (design, deployment, on-call) with Strong focus on operational excellence, monitoring, and AI-assisted development for productivity and reliability

EDUCATION

Stony Brook University, USA   **Aug 2025 - May 2027**
Master of Science in Data Science (Joint Program: Computer Science & AMS)
Coursework: Distributed Systems, Cloud Computing, Computer Vision, Data Structures & Algorithms, Database Systems

Savitribai Phule Pune University, India   **Aug 2016 - May 2020**
Bachelor of Engineering in Electronics and Telecommunications
Coursework: Operating Systems, Object-Oriented Programming, Computer Networks & Security, Machine Learning, AI

PROFESSIONAL EXPERIENCE

PricewaterhouseCoopers   **Oct 2022 – Jul 2025**
Software Engineer   *3× PwC 'Star' Awards, 1× 'Above N Beyond' Award*

- Engineered and scaled distributed microservices using **Java, Spring, and REST APIs**, handling high-volume transactions across global retail clients with a **27%** throughput increase. Optimized system speed through caching strategies
- Built secure **JSON** based integrations between SAP Commerce and external systems using OAuth2 (client-credentials flow) and JWT access tokens, improving cross-platform authorization reliability and achieving **84%+** successful transaction flow
- Designed and optimized **CI/CD pipelines** (Git, Jenkins, Cloud Commerce), cutting the deployment effort by **34%** and accelerating release cadence across multi-region environments. System reliability tracked via Kibana and Dynatrace
- Spearheaded key back-end optimizations by **refactoring service logic**, decreasing average API response time by **16ms** and improving developer productivity by **19%** through modularized service design

Cognizant Technology Solutions   **Nov 2020 – Oct 2022**
Software Engineer

- Engineered high-performance REST APIs and microservices, enabling seamless integration with third-party systems and supporting **reliable backend operations**, which improved overall service throughput by **25%**
- Improved service reliability and operational excellence by implementing automated **unit and integration test suites** (**JUnit, Mockito**) and optimizing **database query execution** through indexing and connection-pool tuning, reducing query latency by **20%** in **production systems**

TECHNICAL PROJECTS

TripMind.AI - *Agentic AI (MCP/LangGraph), Python, FastAPIs, Next.js 14, Amazon Nova, LLMs (GPT-4o-mini)*

- Designed and owned a **LangGraph** and **MCP-based multi-agent** system coordinating Stay, Travel, Experience, Budget, and Planner agents; built a **FastAPI** backend integrating Airbnb/Skyscanner and vector embeddings (OpenAI / AWS Titan), improving reasoning stability to approx **92%** and cutting itinerary latency by **35%**
- Developed a scalable frontend with streaming LLM output, JWT authentication, and Dockerized deployment; load-tested end-to-end workflows to support **50–80 concurrent sessions** during **Princeton Hackthon 2025 securing 3rd Prize**
- Added request-level caching and asynchronous agent execution, increasing throughput by approx **40%** under peak load

SafeArt - *Java, Spring Boot, AWS (S3, DynamoDB, SQS, Step Functions), Docker*

- Designed and operated a cloud-native distributed microservice using Java, Spring Boot, and **AWS (SQS, Step Functions, DynamoDB)**, ensuring scalable asynchronous processing with **P95 latency <2s** for high-volume customer workloads
- Drove operational excellence through automated deployments, observability dashboards (CloudWatch, X-Ray), and resilience patterns such as **idempotent APIs**, **retries**, and **DLQ redrive**, reducing MTTR by **60%**

EventBooker-Pro - *Java, Spring, JPA, MySQL, REST APIs, System Design*

- Built and owned a scalable movie-ticket booking system using Spring Boot, Java, MySQL, and JPA/Hibernate, supporting multi-city theaters, multiple seat categories, secure authentication, and payment integrations (UPI, Credit Card, Net Banking) while reliably processing **1000+ concurrent bookings**
- Designed relational schemas and RESTful APIs, optimized ORM query performance, and added coupon validation, improving booking throughput by **40%** and ensuring consistent, low-latency operation during peak traffic

TECHNICAL SKILLS

Programming Languages: Java, Python, C/C++, Go, Rust, TypeScript, JavaScript, R
Distributed Systems & Backend: Spring Boot, Spring MVC, REST APIs, Microservices, JPA/Hibernate, Kafka/SQS, SAP Commerce Cloud (SAP Hybris), Solr, MCP
Cloud & DevOps: AWS (S3, Lambda, Translate, DynamoDB, CloudWatch), Docker, Git, Jenkins, Kubernetes, Unix, SonarQube, Kibana, Dynatrace, Bitbucket, Agile/SDLC, Jira, Postman
Databases: MySQL, PostgreSQL, NoSQL (DynamoDB), XML, JSON
Data Science & Tools: Scikit-learn, Pandas, NumPy, OpenCV, GenAI, Hugging Face, LangChain, Power BI, MS Office