SOLAIKANNAN PANDIYAN

Senior Software Engineer / Core Back-End Developer / Data Engineer







PROFESSIONAL SUMMARY

Results-driven Backend Developer and Data Engineer with 5+ years of experience in backend development, cloud computing, and data engineering. Proficient in Java & Python with a proven track record of enhancing software efficiency, reducing costs, and implementing scalable solutions. Passionate about low-level engineering, including database architecture, operating systems, and network layers.

| SKILL SET | |
|------------------------------------|--|
| Language | Proficient: Java (17+), Python (3+); Competent: JavaScript, Golang, C, SQL; Intermediate: Bash, C++, Scala |
| Frameworks & Libraries | Spring Boot (Core, REST, Cloud, Security, WebFlux), Node.js, React, Redux, FastAPI, Flask, Jypype |
| Cloud & Infrastructure | AWS (S3, EC2, RDS, DynamoDB, Lambda, Redshift), Docker, Kubernetes, Ansible |
| Data Processing & Servers | Pandas, PySpark, Map-Reduce, Autosys, Netty, Tomcat, Nginx, Uvicon |
| Storage & Messaging | Oracle SQL, PostGres, MongoDB, Redis, Kafka, IBM MQ |
| Logging & Testing | JUnit, Pytest, log4j, logging, Splunk, Elastic Search, Kibana |
| Performance Profiling & Tuning | JMeter, JVisualVM, cProfile, Snakeviz, JVM, PVM |
| Version Control & CI/CD | Git, Jenkins, Maven, Ansible, SonarQube |
| Network Protocols | TCP, HTTPS, FTP, GRPC, WebSockets, SSE |
| Architecture & High level Design | Microservices, Distributed Systems, Data Pipelines, Batch Processing, MVC, REST, SOAP, ETL |
| Low Level Design & Problem Solving | DSA, SOLID Principles, Design Patterns, OOD, Threading, AsynclO |
| Soft Skills | Critical-Thinking, Communication, Ownership, Leadership, Cooperative Team Player |

WORK PROJECT HIGHLIGHTS

CDCP Backend Services - File Upload Microservice (Bank of America - Alternative Investments)

• Created a reactive file-upload service using Spring WebFlux and FTP increasing concurrent processing by 50%

ETL - Data Processing Engine (Bank of America - Alternative Investments)

- Built a high-performance ETL system using Python, Go, Kafka, and Redis, improving data throughput by 80% via concurrency and parallelization GIRT Reporting Engine (Bank of America Alternative Investments)
- Rebuilt a reporting engine using Java and Python with asynchronous MVC like architecture, achieving efficient report generation

Kobo CMS backend (Rakuten Inc)

• Designed validation handlers for book metadata, ensuring compliance across multiple markets

Team Metrics Dashboard (Delta Airlines)

• Automated server access delegation with Python and Bash, reducing response times by 85% and ensuring SLA compliance

EXPERIENCE

Senior Application Developer | Accenture | May 2023 - Present

- Built a high-performance Data Processing Engine that saved millions in fund pdf processing outsourcing costs.
- Developed Java Spring WebFlux microservice to cater to growing downstream services, increasing throughput by 50%.
- Saved \$30k annually in windows server cost by transitioning reporting from Dotnet to Java and Python
- Mentored junior developers in Python, enhancing team productivity and technical skills.

Assistant Application Developer | Fujitsu | March 2022 - May 2023

- Enhanced CMS backend with custom validation and bug fixes, meeting client expectations and project goals.
- Spearheaded the development of a speech-to-text PDF highlighter, gaining client approval and delivering within tight deadlines.

Assistant System Engineer | Tata Consultancy Services | Aug 2019 - Feb 2021

- Automated critical processes, reducing manual workloads by 35% and cutting report generation time by 60%.
- Developed real-time monitoring dashboards using Java Spring MVC and ServiceNow API, improving team efficiency.

Support Engineer Intern | Amazon - Audible | Nov 2018 - June 2019

• Enhanced support and diagnosis tools, achieving 99.9% uptime through effective root cause analysis and dependency management.

NOTABLE WORK-RELATED PROJECTS / TASKS / INNOVATIONS

- Report Generator: Build a callback based java wrapper asynchronously handles report generation (Java, Jpype, Queue, Executor, Callback)
- Async Decorators: Designed thread/process pool-based decorators for event loop compatibility (Python, Asyncio, ThreadPool, ProcessPool)
 Feature Extension Proxies: Developed core library wrappers with resilience patterns, metrics, and asynchronous logging (Python, threading)
- DB Layer API: Developed a database agnostic data layer api helps to make procedure calls effectively with simple configurations (Python)
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- Real Time Speech-To-Text Highlighter: Developed a PDF text highlighting react app with real-time speech transcription (Javascript, React)
 Software Version Audit: Software version classification system that performs 30 million fuzzy comparisons (Python, PySpark)
- Legacy SQL Audit: Automation to document SQL mutations across 1,000+ Java files with JSON and charts (Python)
- Server Access Automation: Automated Linux access, improving response by 85% (Python, Bash, ServiceNow)

ACHIEVEMENTS

- Recipient of the North Star Pinnacle Award FY25 for excellence in specialization, automation, innovation, and SME knowledge.
- Represented DU09 as an Innovation Anchor in the Accenture Innovation Marathon Program FY24
- Developed and presented value-adding features at Q3 business review meeting with BOFA Client
- Created Feature Extension Proxies for Python core libraries at BOFA P2 Innovation Event (Aug 2023)
- Received the BOFA Spot Award FY24 and for a technical improvement initiative
- Successfully transitioned a workload automation initiative at TCS, improving efficiency by 35%
- Delivered a POC project at Fujitsu, receiving client recognition and prototype production approval
- Completed 8-month internship at Audible Amazon, Chennai during final year

EDUCATION

Bachelor of Mechatronics Engineering | Bannari Amman Institute Of Technology | 2015 - 2019

Related Elective Coursework: Data Structures & Algorithms, Operating System, Database

CERTIFICATION

• AWS Developer Associate (DVA-C02) • Azure Fundamentals (AZ-900) • HackerRank Skills Certifications: Problem-Solving (Intermediate), SQL (Intermediate), REST API (Intermediate)