

Contact

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Top Skills

Kafka

Java & Spring Boot

Big Data Technologies

Languages

Korean (Native or Bilingual)

English (Native or Bilingual)

Jongkook Kim

Morgan Stanley

Paramus, New Jersey, United States

Summary

With over 20 years of experience in software development within financial institutions, I specialize in Java, Spring Boot, Kafka, and RESTful Web Services. I have a strong background in software authentication and authorization, and extensive experience leading remote development teams.

Currently, as a Lead Software Engineer at Morgan Stanley, I design and architect distributed data service systems, ensuring high availability and low latency. I work with cross-functional teams to enhance the Financial Adviser experience and lead a team to deliver business-critical systems.

Previously, at Citi Group, I supervised software developers and Big Data engineers, developed strategic plans, and engineered solutions for Hadoop ecosystems. I also consulted on data privacy and deployed automation scripts for system upgrades.

I am passionate about leveraging cutting-edge technologies to drive innovation and efficiency in software development.

Experience

Morgan Stanley

Lead Software Engineer

November 2021 - Present (3 years 10 months)

New York, United States

From November 2021 to the present, I have designed and architected a distributed data service system using modern technologies. This system ensures high volume handling with low latency, 24/7 operation, and high availability and resiliency through a private cloud. I work with cross-functional partners to analyze, scope, and evaluate the feasibility of proposed features and functionality to enhance the Financial Adviser experience. Leading a

team of software developers, I oversee design reviews and code quality to implement and deliver business-critical systems.

In the Read Optimization Service, I engineered a real-time data ingestion system, ensuring 24/7 uptime, 99.9% data accuracy, and processing millions of transactions for IRA accounts at Morgan Stanley and ETrade. I spearheaded the design and implementation of innovative, cloud-based distributed IRA transaction data service APIs for the FA's platform (3D), MSO mobile platform, and ETrade. I successfully modernized and replaced legacy COBOL components on the mainframe, ensuring 24/7 operational uptime with consistent response times. This project is projected to achieve a 35% reduction in operational costs by 2025 through minimizing the mainframe footprint. Additionally, I implemented Grafana dashboards for performance monitoring of distributed applications, significantly reducing incident response time and enhancing operational efficiency.

Technologies I have worked with include Java (Stream, Annotation, Generic, Multi-Thread, Functional programming), Spring Framework (Spring Boot, REST API, AOP, Spring Kafka, JPA, iBatis, Spring Kafka), Kafka, Zookeeper, Redis (PoC), MS SQL, Open Telemetry, Prometheus, Grafana, GitHub Copilot, OpenAI Prompting (PoC), Gradle, and Bitbucket.

Citi

Vice President/Engineer Lead Analyst

September 2011 - October 2021 (10 years 2 months)

Telecommute, US

From September 2012 to November 2021, I served as an Engineering Lead Analyst. In this role, I supervised software developers, Ansible developers, and Big Data engineers both on-site and off-site, conducting performance reviews and staff planning. I developed and executed strategic plans for roadmap integration, automation, application, and data security. Additionally, I architected, designed, and developed robust applications.

I engineered and implemented authentication and authorization solutions for Hadoop ecosystems and provided expert consultation on data privacy modeling for newly onboarded Big Data projects. As the lead architect, I designed and implemented a backend system integrated with Citi's ticketing system to streamline the onboarding process for project teams onto Hadoop, Kafka, Solr, and Hive, connecting 20 Hadoop clusters globally. This system

automatically created workspaces, enabling efficient data processing and management across diverse data types and ingestion patterns.

I engineered and deployed robust automation scripts using Python, Shell, and Ansible to upgrade Red Hat 6 to 7 with Cloudera distribution. I designed and wrote the code while leading a team to orchestrate the seamless OS upgrade on over 6,000 servers, ensuring zero downtime and uninterrupted service for all onboarded projects. I engaged with stakeholders to align data privacy and security measures with organizational goals and regulatory requirements. I also consulted cross-functional teams to design optimal data structures in Hadoop by analyzing data usage patterns, ingestion methods, and data types, ensuring efficient and scalable big data solutions distinct from traditional relational database strategies.

Technologies I worked with include Java, Ansible, Python, Bash, Spring Framework, Cloudera Distribution (Hadoop, Hive, Kafka, Solr, Impala, Sentinel, Ranger), Maven, and Bitbucket.

Bank of Tokyo-Mitsubishi UFJ
Senior Programmer Analyst
March 2011 - September 2011 (7 months)

UBS
Sr Assoc, Systems Dev
April 2007 - March 2011 (4 years)

As a System Developer from March 2007 to March 2011, I designed and developed 3-Tier web-based applications using Java and open-source frameworks. I researched, evaluated, and applied various cutting-edge technologies to meet business requirements.

In the Letter of Understanding (LOU) Project, I systemized the Financial Advisor recruiting process, including upfront and backend deals, approval processes, and payment execution. I implemented dynamic user interfaces using JQuery and Spring MVC. Additionally, I designed and implemented a middleware application (Remote Deposit Capture) that integrated the FirstData vendor system with UBS's bookkeeping system. This facilitated real-time clearing and reconciliation of millions of deposit transactions, significantly reducing operational costs and transforming the check clearing process from several days to real-time efficiency.

I developed a digital solution for UBS home officers to capture signatures, register internal fund transferors, configure transfer limits, and manage approval processes. This application significantly reduced the reliance on paper-based processes, enhancing efficiency and accuracy.

For maintenance and enhancement, I worked on the Automated Account Transfer System (AAT), where I implemented an Excel reporting module using Apache POI from a web-based application in Java. I also worked on the FA Compensation Manager System (FCM), which is used by home office and branch officers to manage the Financial Advisor compensation matrix, FA's production T-12, compensation T-12, and more.

Technologies I worked with include Java, Web Service (SOAP), OpenSAML, WebSphere, Spring, JavaScript, JQuery, Ajax, and Apache POI.

Nomura

Consultant

March 2006 - March 2007 (1 year 1 month)

In Project 1, I migrated the Commercial Real Estate Management System, a key system for the commercial loan group and branches, from Apache Tomcat 3.x to Tomcat 5.5. This system originally ran on the Sybase database.

For Project 2, I enhanced the NCCI Reporting Module, which generates PDF reports for the Commercial Real Estate Management System. These reports serve as Key Performance Indicators to analyze the commercial loan business. I used iReport to design the report layouts and JasperReport and Servlet to compile the jrxml files and generate the reports. I developed various reports to meet user requests, such as the Rate Lock Margin report and the Transaction Hit Ratio report.

In Project 3, I designed and developed the Loan Data Process, a batch process initially written in Sybase stored procedures. This process extracted loan data from the database, processed it, and loaded it into other tables daily. The project aimed to replace the stored procedures with a core Java application running on UNIX for better stability, logging, and control. To achieve this, I used Java SE 5 and Hibernate 3.1 to rewrite the system and Log4j to track the loading process.

Avan

Java Developer

November 2003 - April 2006 (2 years 6 months)

Maintained and enhanced Collection and Report systems, which are written in Java utilizing J2EE technologies (EJB, JSP, Servlet) with Struts framework. The applications support various RDBMS (Oracle and MS SQL Server) and major application servers (Websphere, Weblogic, and JBoss)

Education

Fairleigh Dickinson University

Master, Computer Science · (2000 - 2002)