

SAI KUPPA

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DIRECTOR, ENGINEERING

Results-oriented Director of Software Engineering with a distinguished career in the financial services industry, specializing in trading, clearing, market data, and portfolio asset management platforms. A strategic leader with a track record of successfully overseeing complex software development projects, driving innovation, and optimizing performance in high-pressure environments. Proven ability to align technology initiatives with business objectives, resulting in streamlined operations and enhanced profitability. Recognized for building and leading top-performing engineering teams, fostering a culture of collaboration and excellence. Deep expertise in navigating regulatory frameworks, ensuring compliance, and implementing cutting-edge technologies to stay ahead of industry trends. Seeking an executive leadership role where I can leverage my extensive experience to drive technological excellence and advance business goals within the financial services sector.

TECHNICAL COMPETENCIES

Languages:	Java version 1-11 (Core Java, J2EE), Python, Javascript, Typescript, SQL, C#
Storage:	Sybase, MS SQL Server, AWS S3, Aurora PostgreSQL, Dynamo DB, Mongo DB
Middleware:	AWS SQS, SNS, Kinesis, Kafka, Redis, Memcached, Py Spark,
Web:	HTML/CSS, Bootstrap, React, Angular, REST, GraphQL, AgGrid, Kendo UI, MUI
Frameworks:	Springboot, Hibernate, JPA, Spring batch, JUnit, Mockito, Jest, Cypress
Application Servers:	Tomcat, Apache HTTP, Nginx, Unicorn
Dev Tools:	BitBucket, Jenkins, Gradle, Node, NPM, Webpack, Artifactory, IntelliJ, VSCode
Data Engineering:	Informatica, Pentaho, AWS Glue, Data Warehouse, Catalog, Pipelines, Data Lake
Cloud:	AWS, Azure, IaC CloudFormation, Networking
Emerging Tech:	Advanced Machine Learning, PyTorch, Tensorflow, GenAI LLM, LangChain

PROFESSIONAL EXPERIENCE

PGIM, Newark, NJ

Jan 2020 – Jan 2024

Director, Fixed Income IT (Hybrid)

Responsible for all aspects of systems development and data engineering roadmap for PGIM asset management division while working closely with senior executives in IT and business and leveraging next generation of Cloud native technologies. Lead and manage engineering team, including setting goals, providing feedback and developing talent.

- Managed teams from 10-25 members, increased technology team from only 25 members to 100+ including Japan in 8 years, assisting business in improvement of 200 users/\$500B AUM to 350+ users/\$950B.
- Led cloud transformation program “Stratus”, implemented 15+ AWS services, 10+ full stack applications and 25+ RESTful/GraphQL APIs across multiple Availability Zones in the US, Europe and Japan regions. Implemented standardized application packaging and deployment practice using the concept of base images via Docker containers.
- Spearheaded the build out of “Titan” scalable future proof Credit Aggregation and ESG research data platform using AWS Data Pipelines including S3, Lambda, PySpark, Glue, Data Catalog, Step Functions, Redshift, Scheduling; enabling data upgrade of 750GB to 75TB.
- Oversaw the execution of data center migration program impacting 50+ applications, databases, 100+ servers across Dev, Stage, Prod and DR environments.

- Implemented and managed “Application Development Framework” (ADF), a unified front-end design system with 50+ reusable UI Components in React and Angular frameworks, enabling user experience and consistent looking UI across PGIM applications.
- Led the “Role Based Access Control” initiative for Information Security office. Migrated legacy application authentication and authorization framework to using LDAP, PingFederate and Azure AD impacting 50+ proprietary applications, Microservices and SaaS vendor systems.
- Promoted Agile transformation utilizing modern DevOps CI/CD automation tools including JIRA, Confluence, BitBucket, Jenkins, Artifactory, AWS CloudFormation, enabling collaboration, transparency and predictability in product delivery.
- Consolidated firm-wide 1000+ legacy file transfer workloads with 100+ external sites into “File Transfer Gateway (FTG)” - SFTP based modern AWS Serverless solution, driving operational efficiency and technology innovation.

PGIM, Newark, NJ

May 2015 – Dec 2019

Senior Manager, Fixed Income IT

- Delivered Alpha Fund Admin program for Investment Operations - integrating with 50+ fund admin custodian banks, improving operational process efficiency by 100% and reducing errors caused by manual workflows to zero.
- Led the design and development of full stack application to automate daily and monthly workflows surrounding Money Market fund operations utilizing Angular, Spring framework, REDIS Cache.
- Delivered web based “Portal” with custom UI pages using Angular/React, AgGrid and Tableau BI dashboards to provide users with interactive analytics for Position, PnL, Risk, Attribution data and enhanced user experience.
- Modernized firm’s proprietary ARMS platform by rewriting the calculation engine using highly scalable and massively parallel Spring Batch processing with backend using Java thread pools, stream, collections API, RESTful scalable microservices and distributed systems (Kafka, Redis Cache).
- Joined Attribution and Risk Management Systems (ARMS) team, delivered various system enhancements to the Java based overnight calculation engine for Position, PnL, Liquidity, Risk metrics and Attribution datapoints.

Barclays Capital, New York, NY

Oct 2012 – Apr 2015

Vice President, FICC IT

Led globally distributed team of full stack developers across development, business analysis, testing and support of the proprietary eTrading, OTC Derivatives Trade Execution, Clearing, Prime Brokerage, Pricing, Market Data for Fixed Income Rates, Currency, Commodities (FICC) division.

- Led and implemented technology solutions in support of Dodd Frank regulatory reporting, Prime Brokerage business, Clearing (House, CCP) services, tri-optima OTC exposure management.
- Implemented design and execution of a near-real-time, petabyte scale enterprise Big Data platform capable of integrating the front-to-back trade life cycle and aggregating organization-wide data (RFQs, Orders, Trades, Positions, Settlements/Fails, Finance postings, Profit Attributions, Risk Metrics, Sales Credits, Recon breaks etc.), using Hadoop/HDFS, leading a 10-member team of engineers.
- Additionally, the platform centralized and improved regulatory reporting (CAT, Dodd-Frank, Volcker, SFTR etc.), compliance tracking (AML, Trade Surveillance etc.), and Markets Analytics (Revenue growth/Cross selling opportunities), enabling better decision-making, streamlined processes, and improved risk management.

Barclays Capital, Singapore**Mar 2010 – Sep 2012****Vice President, Emerging Markets IT**

- Relocated to Singapore, oversaw the execution of trading, pricing and market data platforms to Rates desk dealing in Emerging Markets currencies.
- Expanded platform capabilities integrating to SEFs, Clearing Houses and depository trusts in local currencies including AUD, NZD, KRW, TWD, THB, CNY, INR, MYR
- Increased FICC technology team from only 10 members to 50+ including application support team in Barclays, Pune office in India.

Barclays Capital, New York, NY**Jan 2006 – Feb 2010****AVP, eTrading/Rates IT**

- Designed and developed “Transaction Manager” module using event-driven messaging architecture in Spring Integration, SFTP, MQ, integrated with swap execution facility (SEFs), regional Clearing houses (LCH, CME, EuroClear) and regulatory reporting agencies (DTCC, MiFid, SFDR, EMIR)
- Implemented MarkitWire feed to process trade lifecycle confirmations (allocation, terminations, novations, rate resets, swaption exercises) in XML, FpML, SWML via MQ.
- Implemented data feed in Java, MQ, Key/Value backend to deliver real-time trade settlement messages to the back office derivative settlement and reconciliation system called ‘Summit’
- Designed and developed “one-shot” smart trade booking in Java to – regular expression based token parser service that front-office users can use to quickly execute trades.
- Moved to Rates IT technology team, built the proprietary trade capture, pricing, persistence workflow application (TCW) using Java, XML, SOAP/Web Services for 200+ Rates traders and sales users in the US, UK, Europe and Japan desks supporting 1000+ daily average trade executions.
- Joined eTrading IT team, delivered trade capture enhancements in C#, WPF for bond trading platform supporting Treasuries, Agencies, Bonds, T-Bills, and Futures on various trading venues.

ADDITIONAL PROFESSIONAL EXPERIENCE**Citigroup, New York, NY**

Software Engineer

EDUCATION**Bachelor of Technology (BT), Electrical & Electronics Engineering**

JNTU, Hyderabad

MIT Professional Education, Digital Transformation Leadership

Sloan School of Management, MIT, Boston

CERTIFICATIONS

AWS Certified Cloud Practitioner

Technology Leadership Experience

Machine Learning Specialization, DeepLearning.AI