**DEVRIM AKSAKAL**
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## SUMMARY

Self-motivated and detail-oriented individual seeking a challenging position as a HANDS-ON TECHNOLOGY MANAGER. Quick learner; able to identify and apply problem solving and analytical skills with expediency. Enjoys working as a part of a team and able to set effective priorities to achieve short and long-term goals and meet operational deadlines.

Experience/interest in event sourcing, CQRS, event/model driven & MicroServices architectures and concurrent, lock-free, low latency/high throughput algorithms. Proven ability to provide leadership and direct midsize to large teams in delivering high quality software on time and on budget.

## CURRENT SKILLS

- Kotlin, KTOR, Clojure, Java.
- Functional System Design and Development, Domain Driven Design, Model Driven Design, CQRS, Event Sourcing.
- MicroServices Architecture, Reactive System Design (Responsive, Resilient, Elastic)
- Docker, Fabric8/RHT Fuse, Google Kubernetes, Vagrant, Spring, Camel.
- Axon, Vert.x, LMAX, OpenHFT/Chronicle.
- Linear/Constraint Programming (CP-LP), CPLEX.
- Design Patterns: [GoF], [EIP], [EAP], [Reactor; Demultiplexor-Multiplexor], Message Oriented Integration Patterns.

## LEGACY SKILLS

- J2EE, Weblogic, JBoss, Apache Tomcat, Jetty, Hudson/Jenkins.
- Tibco EMS, Tibco RV, MQ, Coherence, Rule Engines
- Sybase, MySQL, DB2, MS SQL, Oracle, SQL/noSQL,
- UNIX, LINUX, IBM-OS/MVS.
- HP-JTune, JRAT, JProbe, JProfiler, VisualVM, Hudson/Jenkins, Apache Ant, Maven.
- Budgeting, Forecasting, Financial Management, System & Resource Consolidation.

## EXPERIENCE

**06/2018 – Present Deutsche Bank AG,** New York, NY
**Global Capital Markets / DCM & ECM**

***Vice President* – Propriety Product Research & Development**

***Camargue* – *Pre-Syndication-Bond Origination & IPO Automation***

Camargue provides functionality that improves the efficiency of pre-syndication bond issuance and origination processes. It includes automated collection of market data, a history of price quote analysis, comp list creation & hosting, pricing engine and associated data. User interface manages price requests and origination process between Origination, Sales&Trading, FSG, ICG, Coverage and DCM Syndicate teams.

- Led small size agile team (6+) to research and develop propriety products for Global Debt & Equity markets.

- Designed and developed POCs to automate bond origination/issuance process (pre-syndication).

- Designed and developed "Reactive" server and client-side services based on MicroServices architecture that utilizes Kotlin/Ktor, Clojure, Java-Vertx, React/Redux, event sourcing, Model Driven Development, CQRS, Docker, Kubernetes, OpenShift, Design Patterns [GoF], Hudson/Jenkins continuous build & deploy.

- Performed technical and solution architect duties to provide technical solutions for complex business problems, major integration problems as well as major IT asset consolidation programs/projects to achieve direct revenue impact, cost reduction and operational efficiency.
- Performed scrum meetings and code, architectural & technology review sessions to ensure delivery quality, system stability and provided technical solutions that are in line with Firm's, domain's and application's technology roadmap.

**05/2013 – 06/2018 Deutsche Bank AG,** New York, NY
**Corporate Finance / Structured Finance – GTO AS Trade Processing**

***Vice President – Lead Technology Manager / ITAO***

***dbEAGLE - Risk Monitoring for Sales&Trading / Corporate Finance – Trading – Sales***

- Managed a large (40+ members) development team with multiple vendor resources.

- Delivered an application modernization program for transitioning a monolithic compliance application to a modern micro service architecture utilizing Domain Driven Design. This resulted in the first containerized DevOps deployment within the bank.

- Performed Application Manager/Technical Lead duties for dbEAGLE application that is utilized to monitor trading activity for CIB and Private Banking Clients on major trading systems such as RMS, GDS, Autobahn FX, 360T and maintain Legal Documentation.
- Led reengineering projects to decommission Tibco BE/BW/Iprocess based server components, replaced by "Low Latency", Java based server side MicroServices architecture that utilizes Java, event sourcing, Model Driven Development, CQRS, Spring, Apache Camel, IBM CPLEX (Symplex Optimizer), LMAX, Docker, Chronicle, Vert.x, Oracle, Rule Engine (custom), Design Patterns [GoF], Hudson/Jenkins continuous build & deploy.
- Led Regulatory and Compliance projects to deliver on requirements such as WpHG, EMIR Legal docs, MaComp and others.
- Performed technical and solution architect duties to provide technical solutions for complex business problems, major integration problems as well as major IT asset consolidation programs/projects to achieve direct revenue impact, cost reduction and operational efficiency.
- Performed scrum meetings and code, architectural & technology review sessions to ensure delivery quality, system stability and provided technical solutions that are in line with Firm's, domain's and application's technology roadmap.

***RePack (SOX Compliant) – Trade Capture, Repackaging, Notes Creation / Structured Finance***

- Managed a midsize (10+ members) development team Performed Application Manager/Technical Lead duties for RePack application that is utilized by credit derivatives business in the creation of new products (Notes/SPV, nonSPV) from existing financial instruments adjusting the terms to the client needs and monitors the trade lifecycle of repackaging notes and collaterals with the aim of minimizing operational risks. Facilitated IT & application services to Structuring business unit with revenue of EUR 4.7 billion/year.
- Led CTB/RTB and strategic projects to achieve revenue generation, product expansion and operational efficiency.
- Lead reengineering projects to improve system stability, scalability, performance and redundancy by moving to component based scalable, redundant architecture leveraging, Jetty, Apache Camel, Java, Spring, REST, Design Patterns [GoF], Hudson/Jenkins continuous build & deploy.

***GMS-Blotter (MAS Compliant) – Trade Capture & Revenue Tracking & MIS Reporting / Structured Finance***

- Performed Application Manager/Technical Lead duties for GMS-Blotter application that is utilized to capture Global Structuring business pipeline and done deals, revenue tracking and MIS reporting. Facilitated IT & application services to Structuring business unit with revenue of EUR 4.7 billion/year.
- Led CTB/RTB and strategic projects to achieve revenue generation, product expansion and operational efficiency.
- Performed scrum meetings and code, architectural & technology review sessions to ensure delivery quality, system stability and provided technical solutions that are in line with Firm's, domain's and application's technology roadmap.

**03/2007 – 05/2013 Deutsche Bank AG,** New York, NY
**Prime Brokerage - Global Prime Finance**

***Vice President – ITAO / IT Project Manager***

***Global Prime Finance Trade Capture & Processing Platform (Tracer):***

- Performed ITPM/ITAO/Application Manager duties to lead "Low Latency/High Throughput" global trade capture and processing system that supports vast product line, including –not limited to- Derivatives, Equities, Options, Fixed Income and Synthetic Equity products.
- Hosted daily scrum meetings with development team members to review assigned tasks, task statuses, technical implementation details as well as technical, functional and operational issues related tasks.
- Performed technical and solution architect duties to provide technical solutions for complex business problems, major integration problems as well as major IT asset consolidation programs/projects to achieve direct revenue impact, cost reduction and operational efficiency.
- Delivered DB's TOP 20 Programs and TOP 100 Projects/Products

- Managed Global Hybrid teams composed of FTEs, Externals and Vendors.
- Communicated and negotiated book of work with business, product development groups and trade processing groups for assigned projects. Represented trade-processing group during weekly Outage & Stability meetings joined by Production Management and Trade Processing groups.
- Led USGPB (US Global Prime Broker) project for trade capture and portal. Product enabled clients to reduce risk by holding non-US assets in US accounts/portfolios. A Direct revenue impact achieved.
- Led re-engineering effort for Equity Options Processing Engine that is responsible for daily Assignment/Exercise processing as well as Monthly/Weekly Options Expiration Processing for GPF. Introduced Auto Recon/Threshold Correction to last day's actions in market side (Contrary, Assign, Exercise), Single Point of Entry for Early Exercises to integrate to Franchise / Street Side Systems, "As of Expiration" Concept to existing process and enhanced performance.
- Led street wide Options Symbology Initiative (OSI) project for Prime Broker Trade Capture. Lead design and development efforts in Trade Capture side for GPF on street wide initiative for options symbology. Coordinated with franchise side upstream & downstream application teams as well as other GPF application teams to ensure all GPF applications' changes are aligned with other firm applications as well as options market's key institutions such as OCC, Reuters, Bloomberg and ADP.
- Led a design and development effort to implement Asset Transfer flow in trade capture side. This enabled GPF clients move assets between their prime brokers. As a benefit multi-billion funds were moved to DB GPF from other Prime Brokers.
- Led a design and development effort to introduce CAP (Client Asset Protection) logic in trade capture side. CAP logic enabled our clients to reduce their risk and being able trade with DB GPF even though they have a non-DB custodian.
- Led an effort to re-engineer 1940 Act/Tri-Party Collateral that enabled GPF to accept more Tri-Party pledges.
- Contributed to team building efforts. Took roles in the hiring new resources in NADC and coached the new hires to get them up to speed. As a result of NADC resource ramp up efforts, was able to deliver on key GPF and street wide projects such as OSI, CAP and Asset Transfers with newly built teams.

- Designed and Implemented near real-time applications that is utilized to facilitate "High Throughput / Low Latency" Trade Capture / Trade Booking (STP) Process using Java, J2EE, EJB, MDB, JMS, SQL, Spring Framework, SWIFT, Tibco RV, Tibco EMS, Sybase, "Pipes and Filters" architectural pattern by using JMS Queues, Engine (Plug-in) Frameworks, Rule Engines, Thread Managers & Pools and Dynamic Content Based Routers.
- Designed and implemented components as a part of integration team that integrated Fixed Income and Equity Trade Capture Engines to unify Trade Booking Process across the Equity and Fixed Income Divisions. Implemented algorithms to represent Derivatives Products such as Credit Default Swaps.
- Designed and implemented algorithms to improve performance, scalability and 'Throughput' to enable existing Trade Capture Engine to process vast amount of financial data. Utilized Performance management tools -for Memory Modeling and Execution Length Analysis- such as HP-JTune and BEA Console for Weblogic Application Server.
- Performed support duties for Trading Floor Personnel to analyze, identify and evaluate data and process anomalies throughout the Trade Capture Process.

**10/2005 – 03/2007** **Lehman Brothers, Inc.,** Jersey City, NJ
**Prime Brokerage - Capital Markets**

***Senior Software Engineer / Developer***

***Capital Markets Trade Capture Engine (Prime Transaction Manager):***

- Designed and Implemented near real-time applications that is utilized to facilitate "High Throughput / Low Latency" Trade Capture / Trade Booking (STP) Process using Java, J2EE, EJB, MDB, JMS, SQL, Tibco RV, Tibco EMS, Sybase, "Pipes and Filters" architectural pattern by using JMS Queues, Engine (Plug-in) Frameworks, Rule Engines, Thread Managers & Pools and Dynamic Content Based Routers.
- Designed and implemented components as a part of integration team that integrated Fixed Income and Equity Trade Capture Engines to unify Trade Booking Process across the Equity and Fixed Income Divisions. Implemented algorithms to represent Fixed Income Products such as Mortgage Back Securities (MBS), TBA, Debt Products (Outright) and Finance Products (Repo, BuySellBack).
- Designed and implemented algorithms to improve performance, scalability and 'Throughput' to enable existing Trade Capture Engine to process vast amount of financial data. Utilized Performance management tools -for Memory Modeling and Execution Length Analysis- such as HP-JTune, JRAT and BEA Console for Weblogic Application Server.
- Performed support duties for Trading Floor Personnel to analyze, identify and evaluate data and process anomalies throughout the Trade Capture Process.
- Importing / Validation Tier which utilizes to import foreign data into the Trade Capture Engine consist of Java Threads (File -Directory Monitors), SWIFT Listener, Tibco RV Listeners, Tibco EMS-JMS Listeners, File Mover and Subject Gateways (JMS).
- Translation Tier (Lehmanizer) which utilizes to translate Client Coded data to the internal data consist of Translation Engine (Plug-in Framework), Thread Management & Pooling Module, Observer (Push Model) and Subject Gateways (JMS).
- Rules-Tier, which utilizes to validate input data consist of VLAD Rule Engine and Subject Gateways (JMS).
- Routing & Communication-Tier which utilizes to route consist of Dynamic Content Based Router and Tibco RV Publisher / Listeners to route trades to the relevant Back Office System (JMS / TibRV).

**06/2004 - 09/2005** **CSI - Banktrade/Tradepaq Corporation,** New York, NY

***Software Engineer / Developer***
***XDrive Project:***

- Designed and Implemented Integration Framework that is utilized to integrate various financial systems to Accounting Systems that implements "Pipes and Filters" architectural pattern by using JMS Queues, Engine (Plug-in) Frameworks, Thread Managers & Pools, Message Gateways and Dynamic Content Based Router.

- Validation, Translation, Rules, Routing & Communication Tiers which utilize to validate, translate, route/communicate input data (JMS Messages), consist of Validation, Translation, Rules Engine Executer, Dynamic Content Based Router and Comm Engine (Plug-ins) Frameworks, Thread Management & Pooling Modules, Observers (Push Model) and Subject Gateways.

***OverDrive Project:***

- Designed and Implemented N-Tier Web-Applications that is utilized to facilitate business travel expense transactions.
- Designed and Implemented algorithms to integrate Java Based Expense Management System to ASP.NET based Project Management / CRM Systems using WS/JAX-RPC.
- Designed and Implemented data caching algorithms to improve application performance
- Client-Tier, which utilizes a Web Browser to display XML/HTML views that were generated by Apache Struts Frame Work.
- Web-Tier utilizes Apache and JBoss application server. Apache Struts components executes within a context of the JBoss/Tomcat application server.
- Business and Database Tiers were defined using Enterprise Java Beans - EJB to implement business logic, provide data persistency and interfaces between Database and Web-Tiers.

***TradeSync Project:***

- Designed and Implemented N-Tier Web-Applications that is utilized to facilitate Customer Relations Management (CRM) and Project Management Systems transactions.
- Client-Tier, which utilizes a Web Browser to display XML/HTML views that were generated by ASP.NET Frame Work.
- Web-Tier utilizes IIS application server. ASP.NET components execute within a context of the IIS application server.
- Business and Database Tiers were defined using C# Objects and MS SQL Server.

**04/2003 – 04/2004 Statlinx Corporation**, White Plains,
***Software Engineer / Developer***

- Designed and Implemented N-Tier Web-Applications that is utilized to facilitate medical transactions between doctors, patients and pharmacists.
- Client-Tier, which utilizes a Web Browser to display XML/HTML views that were generated by Barracuda Frame Work Presentation.
- Web-Tier utilizes Apache, Tomcat application server and Barracuda Frame Work. Barracuda is a Web Presentation Frame Work that implements MVC Component Model which provides an event model, translates web requests into first class objects and provides component models to link the model part of MVC to areas of DOM manipulation.
- Business-Tier was defined using Corba-Idl. Initial implementation was done using Java to build co-located business objects that executed within the Tomcat application server. At some future date, it is a vision that business objects could be –seamlessly and transparently- remoted to CORBA business object server.
- Database-Tier implemented using JDBC to connect to mySQL server on the back-end.

➢ Further Employment History Is Available Upon Request.

## EDUCATION

**Pace University Graduate School of Computer Science and Information Systems**
*Master of Science in Computer Science* ***GPA: 3.61*** New York, NY

**Baruch College -City University of New York**

*Certificate in Computer Programming* New York, NY

**Hacettepe University - School Of Engineering** Turkey
*Bachelor of Science* in Mining Engineering

## AWARDS

Upsilon Pi Epsilon Honor Society in Computing Science.