DAVID RAY REIZES

Senior Consultant | Java Software Engineer | Technical Architect
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Qualifications - Business Domains | https://s3.amazonaws.com/daveray.net/www/qualifications/index.html

PROFESSIONAL PROFILE

Accomplished Technical Architect and Senior Java Full-Stack Software Engineer with over 20 years of experience. Working for Fortune 500 companies including Wells Fargo, and The Walt Disney Studios. With a proven track record designing, implementing and securing distributed enterprise systems. Maintaining high-availability enterprise web applications, microservices, and streaming architectures. Including REST/SOAP APIs for IAM/OAuth2 for the University of California Santa Barbara and PayPal. Experienced with high-throughput transaction environments, embedded systems integration, as well as secure isolated government cloud networks. Most recently focusing on independent deep learning/neural network systems research and operational field evaluation of automated enterprise logistics platforms.

TECHNICAL CORE COMPETENCIES

- **Languages & Runtimes:** Java / j2EE (JDK 8/11/16,17/20,21/25), JEE6 / CDI / JSF, Spring-Framework, Spring-Boot, JPA / Hibernate, JavaScript (ES6), Node.js, Angular 2, TypeScript 4.x, ReactJS, Golang, Python 3.x, C++ (Embedded Context)
- **Frameworks & Architecture:** Spring Boot, Spring WebFlux, Spring Cloud, Angular, Microservices, Domain-Driven Design (DDD), Event-Driven Architecture, SOA / SOAP, REST / RESTful
- **Data & Streaming:** JMS / ActiveMQ / RabbitMQ, Apache Kafka, Spark Streaming, Apache Flink, Hive, Drill, MapR Big Data, DB2, Oracle 11i/12c/21c, MySQL, NoSQL, MongoDB, SQL
- **Cloud & DevOps:** AWS (EC2, S3, VPC), Azure, Kubernetes, Docker, Jenkins CI/CD Pipelines, Ansible, Puppet, PCF, OpenShift
- **Security & Systems:** Identity Access Management (IAM), OAuth2, Single Sign-On (SSO), JAAS, Spring Security, LDAP

PROFESSIONAL EXPERIENCE

Technical Architect & AI Systems Researcher | Independent Consultant — *01/2024 – Present*

(Client: Topstep.com | Topstep Funded Trader / Research Analyst)

- Engineered localized Deep Learning pipelines and custom neural network architectures using Python and PyTorch, optimizing models for restricted edge-compute environments targeting consumer laptops (less than 4GB VRAM footprint).
- Investigated AI-assisted code generation and LLM-driven development workflows, automated test acceleration and strict security, architectural and code validation in Python and Java.
- Developed containerized proof-of-concept projects demonstrating asynchronous microservice integration with local LLMs and deep learning inference layers.
- Modeled market-microstructure, anomalies, and risk-execution parameters in time-sensitive futures environments utilizing the Topstep prop-trading platform.
- Engineered custom data loading and tokenization pipelines, mitigating data synchronization bottlenecks and network latency constraints.
- *Technologies:* python, pytorch, neural network architecture, local llms, git, docker, microservices, java, spring-framework, spring-ai, flink, hive, drill, hadoop, jackson.

Enterprise Logistics | *Amazon.com Services LLC* — **07/2023 – 09/2026**

(Staff: Amazon Logistics: Transportation Operations Management Team)

- Logistics Systems Analysis: Conducted field-level operational deep-dives within high-volume Amazon fulfillment hubs to evaluate proprietary Yard Management Systems (YMS), automated fleet telemetry software (Amazon Relay ELD), and asset-tracking infrastructure (ATA, Relay Garage). *Amazon TOM Team.*
- *Technologies:* handheld devices, yard management systems (yms), fleet telematics, hardware ingestion apis, distributed workflows (*relay.amazon.com*).

Sr. Java Full-Stack Developer | *Rezult Group*

(Contract: Blue Cross/Blue Shield of Alabama) — **01/2023 – 07/2023**

- On remote assignment for Blue Cross/Blue Shield of Alabama, working on an java legacy application re-write project.
- Primarily backend focused converting from Java Applets to Java Spring Web Services and SQL for DB2 backend service integration with mainframe processes and data.
- Along with heavy Angular frontend web development in typescript and CKEditor javascript front end integration.
- *Technologies:* java jdk-8/11, spring framework: spring-boot, spring-rest, web-services, db2, sql, node 14.x, 16.x, angular 14.x, typescript 4.x, ckeditor 5 javascript framework.

Sr. Java Engineer | *Fidelis Companies*
(Contract: Sandia National Laboratories) **02/2022 – 09/2022**

- On assignment to Sandia National Laboratories, Albuquerque NM, with the Enterprise Cloud Services DevOps team.
- Working remotely on PaaS operations, adding new features to existing microservices.
- Providing support for secure enterprise applications and weblogic middleware, and developing Jenkins Blue Ocean CI/CD pipelines within the secure Sandia Restricted Network internal cloud.
- *Technologies: java jdk-8/11/16,* spring framework: spring-boot, spring-rest, splunk, docker, kubernetes, microservices, oracle, mysql, linux, *oracle virtual manager, jenkins, ansible, puppet, python, javascript, sql*.

Solution Engineer / Lead Developer | *Artech Information Systems*
(Contract: Wells Fargo Bank) **01/2021 – 07/2021**

- Senior Solution Engineer / Lead Developer designing REST API blueprints for the strategic Credit Card Re-Invention project.
- Coordinating and collaborating with multiple work-groups across several business domains. Including engineering teams, business leaders and product owners in an agile style.
- Additionally leading a couple of Solution Engineering Forums about technology capabilities for Wells Fargo initiatives. Researching, preparing and delivering presentations in virtual forums with an audience size of more than 35 engineers.
- *Technologies:* spring-boot, spring-rest, splunk, docker, kubernetes, pcf, azure, aws, microservices, kafka, solution-design, architecture, domain-driven-design, event-driven, data-streams.

Sr. Java Software Engineer | *Purple Drive Technology*
(Contract: Infosys Consultant onsite for The Capital Group) **01/2020 – 04/2020**

- Engaged as an Infosys Consultant in the role of Sr. Solutions Engineer for The Capital Group onsite in Irvine, California. Agile team developing new containerized micro-services supporting high-throughput core financial business lines.
- *Technologies:* spring-boot, spring-rest, splunk, docker, kubernetes, openshift, aws, microservices.

Sr. Java Software Engineer / Big Data API Programmer | *West Coast Consulting*
(Contract: DXC Technologies remote for MapR) **06/2019 – 09/2019**

- Remote in Studio City on assignment to DXC Technologies, as a member of the MapR Big Data Consultancy team.
- Data Wrangling using APIs associated with MapR XD Distributed File and Object Store, MapR Database, MapR Event Store for Apache Kafka, Kafka APIs, and Spark Streaming APIs.
- Obtained formal industry certification from MapR Academy: MapR Certified Database Developer and Advanced Apache Spark.
- *Technologies:* java, api, backend, linux, mapr, publish-subscribe,event streaming, hadoop, spark, drill, hive, flink, ha, hdfs, s3, hbase, json, kafka, posix, nosql, json, ojai, zepplin, docker.

Sr. Java Software Engineer / Backend API Developer | *Insight Global* **03/2018 – 11/2018**

- *3/2018 - 9/2018* - on assignment to the ***Walt Disney Studios, Marketing Technology Group*** providing application maintenance and development of backend api's supporting new features. (*Technologies*: spring-boot, spring-rest, spring-cache, spring-aop, spring-webflux, multi-threaded architecture, mongo-db, swagger, gradle).
- *9/2018 - 11/2018* - on assignment to ***NBC Universal, Development Center of Excellence*** as Application Architect, consulting in cloud services and api development. (*Technologies:* spring-boot, spring-rest, spring-kafka, spring-cloud, mongo-db, oauth2, docker, compose, kubernetes, aws, maven).

Sr. Java Software Engineer / Identity Access Management (IAM) | *University of California, Santa Barbara* **05/2017 – 3/2018**

- UC Path Sr. Integration Developer for UCSB Enterprise Technical Services - Software Engineering and Application Lifecycle (SEAL) team.
- Design and development of critical, scalable, responsive and highly available realtime and batch webservices for UCSB IAM systems and processes. Optimizing Apereo CAS, LDAP, and secure tokenized workflows.
- *Technologies:* node.js, aurelia.js, angular.js, bootstrap, jdk-8, spring-boot, spring- security, spring-oauth2, spring-web-services, springfox-swagger, spring-kafka, apache kafka, confluent kafka, apereoCAS, LDAP, mysql, kubernetes, docker, aws, sqs, kinesis.

Sr. Consultant / Java Software Engineer / Technical Architect | *August West Inc* **01/2010 – 05/2017**
Delivered architecture, legacy migration, and software engineering services to clients

- ▷ *PayPal, San Jose, CA [CSC/BravoTech, Texas]*
- ▷ *VSP, Sacramento, CA [ALKU Technologies, Massachusetts]*
- ▷ *AT&T Research Labs, New York - remote [Oxford International, Wisconsin]*
- ▷ *Bosch Automotive, Santa Barbara, CA [Oxford International, Wisconsin]*
- ▷ *Data Trak Inc., Texas - remote [Oxford International, Wisconsin]*
- ▷ *Valicore / Green Hills Software, Irvine, CA [Oxford International, Wisconsin]*
- ▷ *Warner Bros. Studios, Burbank, CA [Odessus, Los Angeles]*
- ▷ *American Tours International, Los Angeles, CA [Creek Systems, Irvine]*
- ▷ *Toyota, Torrance, CA [TPG Consulting, Aliso Viejo]*

- **PayPal:** RESTful API migration, design and development for Identity Access Management MicroServices in production featuring backwards compatibility with existing deployed developer communtiy API's. Production support for Service Level Agreements with code pain-point identification and solution design including recode to parallel processing architecture, code review, quality assurance and production monitoring of Real-Time RISK Rules-Engine based MicroServices for Tokenized Payment Services. Also supported core platform architecture integrated with ebay.com. *Contract: CSC/BravoTech, Texas*
- **VSP Global:** Designed and deployed SAP back-office RESTful APIs integrated with legacy consumer-facing single-payer insurance domain web engines. *Contract: ALKU Technologies, Massachusetts*

- **AT&T Research Labs:** Implemented secure web services, single-sign-on (SSO) frameworks, and robust AT&T SAFE / OAuth2 token security protocols. *Contract: Oxford International, Wisconsin*
- **Bosch Automotive:** Embedded programming for vehicle telematic diagnostic tooling within the automotive
- domain using Eclipse RCP. *Contract: Oxford International, Wisconsin*
- **Valicore / Green Hills Software:** For an end-client in Detroit's automotive domain: Solution Architecture and Full-Stack implementation of a Command-Control GUI including SOAP Web-Services wrapping a RESTful API for an Embedded PKS KeySigning- Server. JAAS Security Providers utilized the Embedded Server's Identity Manager and the application web-services were divided into Secure and Public Domains, with Role–Based Secure Session Management. Supporting 2-Factor Authentication and Federated Security Services integrated with Oracle Identity Manager.
  Contract: Oxford International, Wisconsin
- **Toyota & American Tours:** Architecture, design and implementation of SOA webservices with SOAP, REST, and RESTful API design and development. *Contract: TPG Consulting, Aliso Viejo*
- **Large Scale B2C/B2B Systems:** Architected and scaled highly resilient web-enabled systems for elite brands including: *2008, 2006* - United Healthcare Group, Ovations / Americhoice, *2007* - Wells Fargo Mortgage, *2006* - Boingo Wireless (Embedded Radius AAA utility), and *1999* - eToys *Contract: Sharf, Woodward & Assoc. CA.*
- *Technologies:* sun identity manager, at&t safe, eclipse rcp, osgi, jsp, j2ee, apache wicket, tapestry, gwt, smartclient, hibernate search, lucene, solr, junit, selenium, tomcat, jboss-m3, weblogic 10.3, oracle 11i/12c, glassfish, ota webservices, restful webservices, oauth2, wss, html5, javascript, webpack, babel, es6, typescript, node, express, bootstrap, materialize css, scss webcomponents, cordova, angular, react, vue, webassembly, websockets, stomp, ajax, json, rest, soap, xml, xslt, xsd, jax-rs, jersey, jax-ws, metro, jax-b, jaas, jetty 8, jdk-j2se 7, two-factor auth, oim, iam, apache thrift, soa, node.js, embedded architecture, vehicle telematics, legacy service integration, microservices, tdd, junit, mockito, maven, spring-boot, spring-rest, spring-hateos, spring-framework, spring-ws, spring-security, spring-security-oauth2, spring-security-jaas, springframework, amqp, eclipse rcp, jenkins, nexus, jpa, hibernate, xml, sql, jira, stash, fisheye, bamboo, chef, vmware, oracle box, docker, aws, architecture, client, sass, iaas, paas, aws: ec2, ebs, s3, vpc, vmware, vbox, pivotal cloud foundry, pws, pcf-dev, bosh, packer, virtual clouds, hybrid clouds, architecting the cloud and beyond, aws cloud summit.

TECHNICAL PORTFOLIO (OPEN SOURCE)

Rewards API Java Coding Challenge | *Java, Spring Boot, Maven*

- Developed a RESTful web service showcasing clean architecture, test-driven development (TDD) via JUnit/Mockito, and automated build optimization
- ***Repository***: https://github.com/daveray-net/rewards-api

Trading Strategy - Experimental Trading Bot | *Python, PyTorch, Docker*

- Python source code with Docker environment for python: pytorch with AMD RocM GPU support
- AI-assisted code generation with help from Google Gemini
- Strategy Inspired by Oliver-Velez_Trade-Only-the-First-20-Minutes_YouTube.pdf
  - Oliver Velez Trading Why I Trade Only the First 20 Minutes of the Market
- ***Repository***: https://github.com/daveray-net/nq-trader-app-velez

Local Deep Learning & Inference Engine | *Python, PyTorch, Docker*

- Designed a modular local neural network architecture optimized for hardware-constrained, cloud-independent edge environments targeting consumer laptops.
- Engineered custom data loading and tokenization pipelines, mitigating data synchronization bottlenecks and network latency constraints.
- Sample work in progress, data-pipeline, training-data.
- ***Repository***: https://github.com/daveray-net/training-data-pipeline

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EDUCATION & CREDENTIALS

- **University of California, Santa Barbara** | *Professional Certification Courses (4Q/2017)*
  - Introduction to Project Management - ENGR X452.01- (30u 3.0 A)
  - Project Initiation, Planning, and Integration - ENGR X452.02 - (36u 4.0 A+)
- **Oracle University** | *Technical Deep-Dive Certification (2012)*
  - Architecting the Cloud and Beyond
- **MapR Academy** | *Big Data Professional Certifications (2019)*
  - MapR Certified Database Developer
  - Advanced Apache Spark Certification

- **New Horizons Computer Learning Center**, Culver City, CA | *Professional, Java J2EE*
- **California State University** Northridge, CA | *Professional, Art 2D Media*
- **Granada Hills High,** Granada Hills, CA | *HS Graduate*