# Senior Software Development Engineer

## Jim Sandoval

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Seasoned software engineer experienced in all phases of software lifecycle: design, implementation, test, release and support. Successful track record in front-end, back-end and full-stack roles. Focused on meeting business objectives with software that is easy-to-use, quick to build, robust, and cheap to operate.

Javascript, Vue, HTML, CSS, Java, Spring Boot, Hibernate, SQL, Node, Express. Rest, Asynchronous Messaging, publish-subscribe, concurrency/multi-threading, OAUTH, JWT. Single page apps. Jira, Confluence, git, Kanban, scrum. Maven, Jenkins, npm, webpack.

### Krispy Krunchy Foods, IT Manager

03/20-10/20

IT Manager responsible for day-to-day operations of back-end accounting system, custom iPad-based sales support platform, EDI links to suppliers and distributors, and customer-facing e-commerce platforms.

- Built EDI links for purchase orders and invoices (850, 855 and 810 messages) via IBM/Sterling,
   iTradeNetwork and input/output from Argos Insight accounting system.
- Built IT dashboard to track errors, monitor order volume, integrate with Shopify APIs, script common tasks and create knowledge base of instructions. (Vue, Node/Express, Git)
- Reduced daily database maintenance operations from seven hours to two.
- Launched PerfectlyCajun.com e-commerce merchandising site on Shopify.
- Maintained pricing and location details for krispykrunchy.com.mx (PHP and WordPress)
- Testing, code review, ticket management of bi-lingual video training software for cooks from third-party vendor. Began re-write of system. (Vue, Node/Express, MySQL, Git)

#### **Myriad Genetics**, Senior Software Development Manager

08/15-03/20

Managed 6 engineers (4 devs, 2 test) developing and supporting analytical pipeline of Myriad's hereditary cancer products.

- Added 7 genes to myRisk panel, \$10+m/yr revenue increase, adding coverage for key colorectal cancer genes.
- Adapted analysis for hybridization capture front-end, increased analytical sensitivity and saved \$7m/yr in lab costs.
- Transitioned analytical pipeline to cloud provider DNA Nexus to increase genetic content and handle greater sample volume. Python, GATKv4, AWS Step Functions, Lambda.

Member Informatics Leadership Team and Architecture Review Team. Led development of Vuebased front-end platform for transition to microservice architecture (I UX, 2 SDE). Introduced Site Reliability Engineering concepts that led to formation of separate SRE team. Introduced and led governance of OpenAPI/Swagger REST API definitions.

Designed SDLC processes for release management for first FDA approved companion diagnostics laboratory. Wrote microkernel based Angular / Bootstrap single-page app to track DNA tube retention.

Vue, Javascript, Java, Swing, Sun Grid Engine, Hibernate, Rest, Oracle, Maven, Git, Spock/Groovy, Jenkins, Kubernetes/OpenShift, Splunk, Jira, Confluence.

Principal engineer for Neovest, JP Morgan's client electronic execution platform. Product development role over feature design, responsible for overall UX design and UI programming, defined client/server messaging protocols, mentored and supervised other engineers, and wrote the occasional server component. Specialized in advanced trading features.

Designed and wrote 9 major product features, including industry-leading futures spread tool that calculates real-time pricing for trader-defined synthetic symbols based on hundreds of price updates per second and AlgoGenetics, a ground-breaking algorithmic management tool that allows traders to flowchart order routing between different algos based on real-time market and execution data. Equities, options, futures, pairs trading, option strategies, foreign exchange, contingent orders. 200,000 orders per day, 10,000 users, 150 market data feeds, 500 links to exchanges, brokers, ECNs.

Java, Swing, Git, high-volume/low-latency messaging, threading/concurrency, FIX, AKKA.

## Zettaworks, TIBCO/EAI Consultant

03 - 04

(**Telstra**, Melbourne, Australia) Managed production support team for large-scale TIBCO-based EAI environment responsible for provisioning of nearly all POTS and ADSL service in Australia - 80,000 orders per day, 24x7 support. Led 4 engineers in re-architecture/configuration effort for process control framework, version alignment, configuration management, and new hardware. Java, TIBCO, MQ Series, WebSphere, Oracle.

(**Cingular**, Alpharetta, GA) W rote EAI layer for push-to-talk provisioning for Nokia and Ericsson hardware by extending socket-based XML interfaces used to provision all Cingular wireless service. Java, TIBCO.

#### ForwardCast, Inc., Boston, Co-founder, CTO

01 - 02

Co-founder of niche trading products software start-up. Responsible for product strategy and all software development: architecture, lifecycle, coding, testing, release. Designed, wrote and documented comprehensive 100% Java toolkit for highly interactive, global, secure trading services. Designed multi-currency time deposit application with Citibank's London money market desk. Java, asynchronous messaging, publish-subscribe, Sybase, Solaris, ANT.

## FleetBoston, Boston, Architect, Developer (Consultant)

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Designed and built global foreign exchange limit order system integrating trading floors and customers in North America, Asia and Europe into a single, real-time 6x24 trading environment. Worked directly with COO of global foreign exchange to define requirements. Enabled a 500% increase in order volume, eliminated missed or double-filled orders. Delivered first version in 4 months. Developed and supported four successive versions including real-time feed of market rates. Used for over 10 years, ran essentially unattended and bug-free for last six years. Java, asynchronous messaging, publish-subscribe, Solaris, Sybase.

Managed team of 12 developers for money market and foreign exchange businesses. Responsible for selecting teams, architectures, tools, vendors, and project schedules based on business requirements and available resources. Coordinated multi-disciplinary teams across trading, marketing, graphic design, corporate data security, audit, operations, QA and infrastructure departments.

Project manager and architect for one of the first and largest transaction systems on the Internet at the time, with ~\$40 billion invested *per day*. Enabled 400% increase in trade volume, 80% reduction in settlement errors, and 15% reduction in traders. C++, cgi-bin, HTML, Sybase, Solaris.

### **UNM Hospital**, Albuquerque, Lead Developer

93 - 94

Designed, wrote and supported patient tracking system for Emergency, Trauma, Observation, and Urgent Care units. Worked with medical faculty, attending physicians, and nursing administrators to define requirements, overall project scope and schedule. Wrote windowing library for 24x80 character VT200 terminal displays. C, VAX/VMS.

### More, Inc., Albuquerque, Lead Developer

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Customized teller, account management and account sales software for retail banks. Full-time travel and client contact.

## Citibank, New York City, Lead Developer

87 - 91

Designed and wrote highly interactive, high-performance trading systems for foreign exchange, stocks, bonds and warrants. Traveled internationally to install software, evaluate software teams prior to acquisitions and analyze marketability of internally developed systems. Early adopter of SQL and microservice architectures using asynchronous messaging and publish-and-subscribe. C, VAX/VMS, Sybase.

#### **BDM, Inc.**, Albuquerque, Modeling and Simulation, Developer

85 - 86

Designed and wrote mathematical models and computer simulations of ICBM warfare, aircraft squadron readiness, and spy satellite constellations. Monte-Carlo simulations, Poisson modeling, Keplerian orbital mechanics. Secret and Critical Nuclear Weapons Design Information clearances. C, FORTRAN.

#### B.S., University of New Mexico

1985

Applied Mathematics (minor: English Literature), Dean's List '84-'85