

# BRIAN CHAN

---

5 Elkins Circle ♦ Exton, PA 19341 ♦ (215) 327-8676 ♦ [brian.chan.01@gmail.com](mailto:brian.chan.01@gmail.com)

---

## SUMMARY

Accomplished Senior Technologist with a proven track record of delivering technology solutions across multiple industries. Highly capable of wearing multiple hats, equally adept in serving as a Hands-on Engineer, Application Architect and Technical Lead. Passionate about learning and applying new technologies and while maintaining a balance between innovations and deriving business values. Proficient in a broad range of technologies:

- RESTful API
- Cloud Computing
- Big Data Analytics
- NoSQL Databases
- Relational Databases
- Languages: Java, Python, Node.JS

---

## TECHNICAL SKILLS

---

- **Languages:** Java/JEE, JavaScript (Node.JS, AngularJS), Python, Scala.
- **NoSQL:** MongoDB, Cassandra, DynamoDB
- **Big Data Analytics:** Hadoop (HDFS, HBase, Hive, Pig, Sqoop, Flume), Apache Spark.
- **Cloud Computing:** Amazon EC2, Amazon Web Services (S3, DynamoDB, RDS, Data Pipeline, EMR).
- **Relational Databases:** Oracle, MySQL, SQL Server.
- **Java Frameworks:** Spring Framework, Spring Batch, Spring Boot, Hibernate.
- **Tools:** Eclipse, Gradle/Maven/Ant, GIT, Subversion, Jenkins, Talend.

---

## PROFESSIONAL EXPERIENCE

---

### MEDECISION, Wayne, PA

10/2014 – Present

#### Senior Engineer

Currently working as a senior member of the innovation team responsible for prototyping and rapid development of a wide range of new applications in the Population Health Management space. Play key role in defining application architecture and technology stack. Utilize cutting-edge technologies to build MicroServices, Web/Mobile Apps and Big Data Analytics solutions. Work on the following technology stack:

- MicroServices (REST API): Spring Boot/Java and Node.js.
- Web and Hybrid Mobile Applications: MongoDB, Node, Angular, Ionic Framework.
- Big Data Analytics: Hadoop (Hortonworks, Amazon EMR), Spark, Python, Talend.

### INDEPENDENT CONSULTING

06/2010 – 10/2014

#### Senior Lead Consultant

Versatile Senior Lead Consultant, successfully served multiple roles as a Tech Lead, Application Architect and Senior Hands-on Engineer through several client engagements. Extensive experience in delivering software in an Agile environment. Specialize in Web Applications, Web Services (SOAP, REST), Relational Database, NoSQL and Cloud Computing. Capable of coding in multiple programming languages: Java, Python and JavaScript. Clients includes: NAVTEQ/Nokia, Elsevier, Comcast and Vanguard.

---

**PROFESSIONAL EXPERIENCE (*CONTINUED*)**

---

**COMCAST, Philadelphia, PA**  
**Senior Lead Consultant****02/2014 – 07/2014**

Develop highly scalable RESTful API that powers the next-generation of Comcast XFINITY Home Security/Automation platform. These web services are consumed by Mobile (IOS, Android) and Web Clients.

**Technology Stack:** Java, Spring Framework, Jersey REST Web services, Memcached, Oracle, Cassandra, Tomcat.

- Implement highly scalable RESTful API using Jersey/Spring/Java/Websockets.
- Integrate 3<sup>rd</sup>-party systems (iControl, EcoFactor) into the Comcast XFINITY Home Automation Platform.
- Provide guidance to Mobile Teams to ensure proper API integration.
- Play a lead role in introducing proactive system health and performance monitoring in a production environment (Splunk, Nagios).

**ELSEVIER, Philadelphia, PA**  
**Senior Software Engineer****07/2012 – 2/2014**

Develop a scalable cloud-based Content Management System to serve high volumes of electronic published medical resources (journals, books, Medline, clinical trials data, drug information and other health science content). This system provides data feeds for the **Elsevier's ClinicalKey** (Smart Content Search Engine), which serves medical professionals with faster and more intuitive clinical insights from trusted authoritative sources.

**Technology Stack:** Java, Spring Framework, Spring MVC, GWT, Amazon AWS (S3, SNS, SES, SQS, Amazon Oracle RDS, SimpleDB, DynamoDB, Data Pipeline)

- Develop data ingestion framework to facilitate rapid integration of new content of various formats into the system.
- Develop a variety of data parsers using DOM, SAX and Streaming XML Parsers.
- Automate and orchestrate data ingestion processes using a combination of EMR and Amazon Data Pipeline.
- Develop data content tracking and alert services, reducing issue identification and resolution time by 60%.
- Develop RESTful API (Spring MVC) to provide data access to front-end and middle-tier.
- Lead and mentor junior developers.

**NAVTEQ/NOKIA – Location and Commerce, Malvern, PA**  
**Lead Software Engineer****06/2010 – 5/2012**

Lead Engineer on a SCRUM team of 6 developers. Designed and implemented a Location-based Mobile Advertising Platform, which comprised of API's and Web Applications for managing Campaign Content, Storefront Locations /Maps and Location-aware Ad Serving API serving 6+ million daily requests.

**Technologies:** Java/JEE, Hibernate, Spring (Core, Spring MVC), JBoss RESTEasy, Jersey, JMX, JQuery.

**Application Platforms:** Tomcat, Apache, Microsoft SQL Server, Cassandra, Linux, Nagios.

- Led a SCRUM team in hands-on application development, successfully deliver a new application within 3 months.
- Collaborated with Enterprise Architects to ensure proper technology selections across all projects.
- Collaborated with Product Owner, SCRUM Master and Stakeholders in Backlog prioritizations, User Story analysis and Sub-task break-downs/estimates. Assisted in workload and resource allocations.
- Worked closely with cross-functional teams in application testing, rollout and on-going support.
- Assisted existing .NET developers in transitioning to Java and become productive within 2 months.
- Incorporated Test-Driven Development, Automated Testing and Continuous Integration into Development Cycle.
- Implemented Self-Service API to enable Business Partners to integrate with Nokia's Location-based Advertising Platform into their systems.
- Implemented application monitoring and performance profiling (JMX and Nagios), allowing proactive issue identification and speed up issue resolution time.

---

**PROFESSIONAL EXPERIENCE (CONTINUED)**

---

**PFIZER (formerly Wyeth) – R&D Business Technology, Collegeville, PA**  
**Senior Technology Lead****02/2002 – 06/2010**

Designed and developed custom applications as well as integrating Commercial Software Products into existing systems to support Clinical R&D. Served as a lead developer, architect and technical lead on various projects over the years.

**Technologies:** Java, J2EE (EJB, JMS), JSP, Hibernate, Spring Framework, Struts, Web Services, Eclipse RCP, PL/SQL

**Application Platforms:** WebLogic Application Server, Oracle Database (9i, 10g)

- Analyzed and translated business and functional requirements into architectural and detailed technical designs.
- Led an agile team of developers through Design, Implementation, Testing and Code Review.
- Collaborated with vendors to integrate their software products into existing systems.
- Planned and managed release cycle for new applications as well as enhancements and bug fixes.
- Provided Project Management with technical details needed to develop project charters, project plans and schedules.
- Worked closely with QA/Compliance/Change Management/infrastructure groups to ensure timely project delivery
- Provided technical guidance to QA team in conducting system validation and performance/scalability tests.
- Assisted Production Support Team in troubleshooting and issue resolutions.
- Evaluated new technologies and build proof-of-concept prototypes.

**Notable Projects:**

- ♦ **CIDER3 Data Warehouse:** centralized repository for clinical trial data collected from multiple sources (Oracle Clinical, Medidata Rave and other vendors). Transform heterogeneous data into industry-standard CDISC format (Study Data Tabulation Model). Supports user-defined SAS and Java data derivation functions. Provides a one-stop shop for clinical data review and generation of SDTM datasets required for FDA regulatory submissions.
- ♦ **E-Review:** Integrated environment for Clinical Programmers to develop and execute SAS clinical data reports.
- ♦ **CRF Shipping Tool:** Automate workflow of CRF (Case Report Form) order, processing, production and shipment.
- ♦ **E-Randomization:** Integrated web portal to support clinical trials enrollment, randomization and supply tracking.

**THOMSON REUTERS (formerly Reality Online, Inc.), Norristown, PA**  
**Senior Software Engineer****01/1999 – 02/2002**

Developed web portals that deliver real-time streaming market data, portfolio management and online trading capabilities for brokerage firms. Technologies employed include J2EE, AWT/Swing Applet, ASP/COM, TIBCO Rendezvous messaging middleware and Oracle database.

- Collaborated with clients to collect user requirements and prepared design documents.
- Applied UML and industry-standard design patterns to design reusable J2EE components.
- Implemented a “subscribe-publish” message bus based on TIBCO Rendezvous protocol to deliver streaming data from the TIBCO IFinance Streaming Server to a Java applet.
- Developed digitally signed Java applets (AWT, Swing) to display streaming stock quotes, news and charts.
- Maintained existing web portals written in ASP and Meta-HTML, Oracle 8i PL/SQL stored procedures.
- Designed application performance test plans to be executed by QA team.

---

**EDUCATION**

---

- Drexel University: Master of Science in Computer Science
- Drexel University: Bachelor of Science in Electrical Engineering