

BRIAN CHAN

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

LinkedIn: <https://www.linkedin.com/in/brianchan01/>

GitHub: <https://github.com/bchan01>

SUMMARY

Senior Technologist (**AWS Certified Solutions Architect**) with a proven track record of delivering technology solutions across multiple industries. Highly capable of wearing multiple hats, as a Hands-on Engineer, Application Architect and Tech Lead. Passionate about learning and applying new technologies to solve challenging problems. Highly adept at developing applications in a polyglot environment (Java, Node, Python). Currently focus on building microservices with AWS cloud technologies. Proficient in a broad range of technical areas:

- Microservices
- Serverless Architecture
- Cloud Computing
- Full-stack Development
- NoSQL Databases
- Relational Databases

TECHNICAL SKILLS

- **Languages:** Java, JavaScript (Node.JS, AngularJS, Vue.js), Python.
- **NoSQL:** MongoDB, DynamoDB.
- **Cloud Computing:** AWS (Lambda, ECS, RDS, DynamoDB, etc.), Google Cloud.
- **Relational Databases:** Oracle, MySQL, PostgreSQL, SQL Server.
- **Frameworks:** Spring Framework, Spring Boot, Express.js.
- **Tools:** Eclipse, Gradle/Maven/Ant, GIT, Jenkins.

PROFESSIONAL EXPERIENCE

CAPITAL ONE, Wilmington, DE

4/2017 – Present

Lead Software Engineer | AWS Certified Solutions Architect

Collaborate with multiple agile engineering teams to embark on a journey to modernize banking applications. Play key role in defining application architecture and technology stack as well as providing guidance to engineering teams. Participate in company-wide initiatives to break monolithic applications into microservices and migrate all systems to AWS Cloud. Notable achievements include:

- Design and implementation of a Serverless Event-driven Architecture to ingest account/transaction/statement data from legacy mainframe system (FIS) into cloud data stores (S3, Aurora RDS, DynamoDB). Core technologies: AWS Lambda, S3, SNS, Step Functions, Java/Python/Node.js.
- Implement highly scalable and resilient Microservices to serve customer accounts, transactions and bank statements to Capital One 360 Web and Mobile apps. These services are implemented in SpringBoot/Node.js and deployed as AWS Lambda/ECS in multi-region active-active mode.
- Lead design and implementation of a brand-new Capital One 360 bank statement generation engine. This includes a newly designed statement PDF along with an automated workflow for validation, approval and customer notifications. The entire stack is implemented as serverless architecture (AWS Lambda).
- Lead implementation of a streaming data platform based on Kafka to stream real-time transaction data to Machine Learning pipelines as well as ingesting into the Enterprise Data Lake.
- Actively participate in recruiting and mentoring engineering talents
- Speaker at Technical Conferences (Datadog DASH Conference NYC 2018)

PROFESSIONAL EXPERIENCE (CONTINUED)

COMCAST, Philadelphia, PA
Senior Consultant**9/2016 – 2/2017**

Part of the team that develops Comcast Smart Internet, a new product offering that allows XFINITY customers to manage their home WIFI network from anywhere. Build and maintain highly scalable cloud-based API consumed by Web and Mobile applications. This Hypermedia REST API integrates user security, account and services that interfaces with XFINITY internet devices. Technologies used included: Java, Spring, Amazon AWS (SQS, DynamoDB) and Python.

MEDECISION, Wayne, PA
Senior Software Engineer | Application Architect**10/2014 – 8/2016**

Serving as a senior member of the R&D team responsible for design and development of a wide range of new applications in the Population Health Management space. Play key role in defining application architecture and technology stack as well as providing guidance to junior engineers. Utilize cutting-edge technologies to build Microservices (REST API), Web/Mobile Apps and Big Data Analytics solutions. Notable projects listed below:

- Key member of the team that launched the company's first Mobile App that enables patients, caregivers and providers to effectively coordinate care through "social circle". Tech stack: Node.JS, MongoDB and Ionic Framework.
- Key member of the team in charge of delivering the company's next generation Big Data Analytics Platform.
 - Develop data pipeline to ingest Medical Claims and EMR/EHR data coming into MongoDB.
 - Write Python scripts to de-identify user privacy data in order to comply with HIPPA laws.
 - Develop Web application to provide a real-time 360-degree view of member claims and EMR data.

COMCAST, Philadelphia, PA
Senior 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.

- Implement highly scalable RESTful API using Jersey/Spring/Java/Websockets.
- Integrate 3rd-party systems (iControl, EcoFactor) into the Comcast XFINITY Home Automation Platform.
- 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.

- 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.

PROFESSIONAL EXPERIENCE (CONTINUED)

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)

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.

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)

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.

EDUCATION

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