

Bill Sheng

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Skills

Languages:	Java, Python, JavaScript/TypeScript, SQL, Golang, HTML/CSS
Frameworks:	Node, React, Angular, Socket.IO, Spring
Data:	Hadoop, Spark, Kafka, Cassandra, MongoDB, Elasticsearch, MySQL
Infrastructure & Tools:	Docker, Kubernetes, CI/CD, Azure, Git, phpMyAdmin

Professional Experience

Full Stack Developer • LCBO|next

Sep 2019 – Dec 2019

- Built a cron-based web scraper that extracts marketable content from 950+ webpages, increasing app conversion paths from 9 to 400
- Developed a Node ETL pipeline that tags products with new properties to improve search precision, decreasing search exits by 25%
- Designed an indexing strategy with Elasticsearch aliases that prevents data loss during API crashes in 2 large-scale data pipelines
- Leveraged Redis caching strategies to scale store inventory microservice, improving performance audit of core products app by ~15%
- Co-built and deployed a Node recommendation engine, leveraging compound Elasticsearch queries to address customer indecision
- Created technical documents for POC app and presented to corporate stakeholders, receiving approval for deployment to 100+ stores

Software Developer • OpenText

Jan 2019 - Apr 2019

- Developed a monitoring service with Spring and Thymeleaf that reports on the state of Java Agents, notifying users of build timeouts
- Refactored a high-profile deprecated dashboard into an Angular PWA used by 800+ stakeholders at annual enterprise conference
- Practiced test-driven development and wrote unit tests with Mocha, Mockito, and JUnit, achieving average code coverage of ~94%

Infrastructure Specialist • Canadian Tire Corporation

May 2018 – Aug 2018

- Streamlined inefficient VM configuration processes by writing PowerShell automation scripts used by 50+ employees across IT teams
- Engineered large-scale virtualized deployments with VMWare, updating 100+ corporate computers with no ensuing complications

Leadership Experience

Software Developer • UWBlueprint

Sep 2019 – Dec 2019

- Built a web platform for a non-profit investment group (~150 users) aimed to scale and manage their application selection process
- Co-designed a document data model to represent application flows and developed CRUD operations with React/Redux and MongoDB

Projects

Oubre Sentiment Analysis

Sept 2019 – Dec 2019

- Implemented a data streaming platform with Java that performs sentiment analysis on tweets regarding controversial athletes
- Used Kafka and Spark to ingest, analyze, and load data into a Cassandra data warehouse, allowing results to be queried/displayed

Media Management Platform

May 2019 – Aug 2019

- Developed a PHP web application that interacts with a MySQL database designed and managed on phpMyAdmin
- Wrote complex SQL queries to provide functionality for podcast subscriptions, user profiles, and public/private playlists

Blitz

May 2018 - Aug 2018

- Built a web app where users can authenticate, define contact parameters, and receive real-time NFL game notifications while offline
- Used TypeScript, Node, Express, and MongoDB to leverage PassportJS local authentication, Twilio SMS API, and MySportsFeeds API

Education

University of Waterloo • 3A Management Engineering

Sep 2017 - Apr 2022 (expected)

Relevant Courses: Database Systems, Data Structures and Algorithms, Decision Support Systems, OOP, Optimization