

Selina Li

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Skills

- **Languages:** Java, C#, C++, C, SQL, JavaScript/TypeScript, HTML, CSS, Python
- **Technologies:** ASP.NET, Spring Boot, Angular, Git, AWS Lambda, MyBatis, Servlet-JSP, JUnit
- **Tools:** Microsoft SQL Server, MySQL, Redis, Postman, Apache JMeter, Apache Maven, Swagger

Work Experiences

Software Developer Co-op | University of Waterloo, Faculty of Engineering 1

May – Aug 2021 | *ASP.NET, Microsoft SQL Server, AngularJS, Talent API Tester*

- Redesigned and refactored the ASP.NET API in C# to **improve code reusability**, combining multiple endpoints with similar functionality and created reusable generic methods in the base service class
- Created stored procedures to encapsulate a series of SQL queries to be executed on MS SQL Server, and optimize performance by using temporary tables to speed up query execution

Sep – Dec 2021 | *ASP.NET, Microsoft SQL Server, AngularJS, Bootstrap*

- Designed and developed the **entire front-end and back-end** of a historical data system, which allows administrators to search for the archived data of each semester and convert them into EXCEL tables
- Built an email notification service in .NET Core, allowing the application to read email templates in txt files to generate emails and send to the SMTP server for delivery

Software Developer Co-op | Dealer-FX, Divisional Office

Jan – Apr 2021 | *ASP.NET, Microsoft SQL Server, Angular 8, Google Analytics, AWS Lambda*

- Built **AWS Lambda** handlers and unit tests in C# to process Amazon SQS message events and redirect them to VPC-specific Lambdas, with monitoring events and logs by AWS CloudWatch
- Implemented health checks into an ASP.NET API to test the app's dependencies, including databases and external service endpoints, to confirm availabilities and normal functioning

Backend Developer Internship | Xyebank, Divisional Office

Jun - Aug 2019 | *SpringBoot, Redis, JUnit, Postman, Apache Maven, Apache JMeter, Ubuntu*

- Applied Redis in **database query results caching**, optimizing running time by over 90%, to reduce data access latency and ease the load off MySQL and load tested the API behaviour using Apache JMeter
- Designed and developed SpringBoot RESTful API endpoints in Java to create, read, update, delete the data from MySQL and unit tested with JUnit, and tested API using Postman

Personal Project

Brute-Force Attack Protection Login | *SpringBoot, Redis, JUnit, Postman*



- Developed a RESTful API in Spring Boot with Redis, that will lock out accounts for 15 minutes after exceeding 5 consecutive unsuccessful login attempts to block brute-force attacks

Education

University of Waterloo

Bachelor's of Applied Science, Computer Engineering

Sep 2019 – Apr 2024

Waterloo, ON, Canada