

# Marcus Chok

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## SKILLS

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**Languages:** TypeScript, JavaScript (ES6+), C#, C, C++, Java, HTML, CSS

**Frameworks and Libraries:** React, Redux, ASP.NET Core, Next.js, Express, Node.js, Angular, Spring Boot

**Tools and Technologies:** Git, SQL Server, MySQL, PostgreSQL, MongoDB, Heroku

## EXPERIENCE

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### TRIYO (TS Analytics Canada Ltd.)

Toronto, ON

*Full Stack Developer*

Sep 2021 – Dec 2021

- Implemented dynamic dashboard widgets using React and Redux to display user-customized content
- Designed API endpoints and services using ASP.NET to compile data from multiple tables for display
- Optimized LINQ queries to a cloud-based SQL Server instance to **decrease potential latency by 66%**
- Refactored HTTP request services to simplify configuration, **eliminating 10+ instances of code duplication**
- Spearheaded improvements to cross-team collaboration, **reducing bugs reported between sprints by 31%**

## PROJECTS

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### Listen and Go

Apr 2021 – May 2021

- Architected an accessible audio player using Angular Material to play remote YouTube playlists and songs
- Migrated existing REST API to GraphQL, optimizing data throughput and **decreasing loading times by 15%**
- Designed a normalized PostgreSQL database using Entity Framework Core to eliminate data repetition
- Automated HTTP requests to the YouTube API and used .NET Core Identity to prevent unauthorized calls

### Unified Chat

Mar 2021 – Apr 2021

- Created a real-time chat using WebSocket, modelling message data using Spring Data JPA and Hibernate
- Divided features into separate Angular modules to improve maintainability and **increase performance by 5%**
- Improved security by employing Auth0 and Spring Security to authenticate users and validate access tokens

### Expense on Rails

Feb 2021 – Mar 2021

- Developed a sortable user interface with Next.js and Material-UI to visualize user expenses and transactions
- Refactored state management logic with Redux to **reduce the number of database queries by 50%**
- Built a RESTful API with Express to allow users to input, update, and delete data from a MongoDB database
- Implemented authorization using Passport, encrypting data with JSON Web Tokens to ensure secure transfer

### MyAnimeList Manager

Jan 2021 – Feb 2021

- Created a mobile-friendly website using React and Bootstrap to manage user MyAnimeList accounts
- Leveraged Jikan API to implement search functionality, displaying and parsing **200+ data points per second**
- Engineered an API backend using Node.js and Express to securely authenticate users using OAuth 2.0

## EDUCATION

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### University of Waterloo

*Candidate for Bachelor of Computer Science*

Sep 2020 – Present

- Term Distinction, Fall 2020 & Winter 2021 (GPA: 3.96, CAV: 94.40%)