

Zach Easterbrook

FULL STACK SOFTWARE ENGINEER / DEVOPS ENGINEER. ASPIRING SITE RELIABILITY ENGINEER

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Work Experience

Shipperbee Inc.

Guelph ON, Worked Remotely

SENIOR SOFTWARE ENGINEER / DEVOPS ENGINEER

September 2020 - Present

- Worked with a remote team as part of a startup company to help bringing a new product in the logistics / shipping market to fruition. Went from a volume of 100 parcels per day to over 5000 a day in the space of a few months. Integrated with well known Canadian parcel carriers.
- Managed infrastructure of our cloud resources using **Terraform**. Solved scaling problems involving our database as we rapidly grew.
- Wrote Azure pipelines in **YAML** and integrated our repos with **SonarCloud** for **Static Code Analysis**. Managed branch policies and release policies based on the results of this code analysis
- Worked in **C# 8.0, ASP.NET Core**, worked with Azure functions and a lot of Azure cloud technologies
- Was part of an internal standards committee to decide things like API naming schemes, coding guidelines, etc.,
- Participated in the hiring process for multiple developers

Wired Solutions

Windsor, ON, Worked Remotely

FULL STACK SOFTWARE ENGINEER

May 2020 - September 2020

- Lead a project for the design & implementation of an analysis interface for the statistical research process of Q Methodology, worked with researchers to meet their needs. Responsibilities included prototyping the design with **Axure 9**, Writing stories and assigning them in **Azure DevOps**, Managed the source control for the project using **Git**.
- Statistical processes involved Factor Analysis, Judgemental Factor Rotation (i.e. 'by hand'), the Math.NET Numerics library was used to help in these tasks
- Worked mainly in **C# / ASP.NET Core MVC** and **TypeScript** using the **Angular 8** framework.
- Learned to work with docker and selenium, how to properly write tests (Unit, Integration, UI).

AppNouveau

Windsor, ON

FULL STACK SOFTWARE ENGINEER

Apr. 2019 - May 2020

- Built new features using **C# / ASP.NET Core MVC** for local businesses. Apps included a Daycare Management System and Tutoring Application
- Designed front-end interfaces using **reactjs** and **TypeScript**. Designed APIs to talk between the front and back
- Designed features for mobile versions of these web applications using **Dart / Flutter** and **react-native**

Sylectus / Omnitrac Canada

Windsor, ON

FULL STACK SOFTWARE ENGINEER

July 2014 - August 2018

- Maintained legacy systems built using **VBScript** and **Classic ASP**. Was responsible for refactoring several of these systems to modern **C# / ASP.NET**
- Introduced **redis** to the site architecture and reduced load times site wide. Set up **redis sentinel** to add high availability (HA)
- Integrated with a third party API to geocode / reverse geocode geolocation information, I integrated this API with redis and serviced thousands of requests every second.
- Helped migrate 15 production databases from **PervasiveDB** to **MariaDB** with no data loss

University of Windsor

Windsor, ON

COMPUTER SCIENCE TUTOR & TEACHING ASSISTANT

Sept. 2011 - Apr. 2019 (Seasonally)

- Tutored students in all years, held office hours and marked assignments / exams

IBM Canada

Markham, ON

CLOUD SOFTWARE ENGINEERING INTERN

May 2012 - Aug. 2013

- Wrote software in **Java** and **Groovy** to deploy and provision operating systems to bare-metal hardware asynchronously.
- Wrote scripts in **Perl** to configure the internal network on the rack at boot-time.

Navetz Software

Windsor, ON

JUNIOR SOFTWARE ENGINEER

Dec. 2010 - Jan. 2012

- Wrote and maintained applications written in **PHP**, **JavaScript**, and **MySQL**, including an application for the Detroit Red Wings

Education

University Of Windsor

Windsor, ON, Canada

B.S. IN COMPUTER SCIENCE W/ CO-OP (HONORS)

April 2020

Technical Skills

Cloud Technologies	Terraform, Azure functions, Azure app configuration, Azure KeyVault, Azure pipelines, Azure APIM (API Management), App Services, Azure Storage Accounts, Postgres for Azure, Redis for Azure, etc., Some exposure to EventGrid
Languages	C#, HTML/CSS/JS, C++, C, Java, Python, Elixir, Erlang, Rust, VBScript, SQL, TypeScript, Dart.
Frameworks	ASP.NET Core, Angular 8+, ASP.NET WebForms, Django, Flutter, ReactJS, C++ STL
Databases / Document Stores	MySQL, MariaDB, Postgres, MSSQL, Redis, Azure CosmosDB, Informix, DB2, Pervasive, SQLite
Operating Systems	OS X, Windows, Unix, Linux (RHEL / CentOS, Ubuntu, Arch, Gentoo), AIX

Extracurricular Activity

CS Games

Montreal, QC

ATTENDEE

March 2020

- Was chosen as part of 20 students to represent the University of Windsor in this competition, selected for the areas of Security, Networking, and Operating Systems

Various Open Source Projects

Various

CONTRIBUTOR

Sep. 2010 - Present

- Contributed to the BRL-CAD Project, replaced their old custom string implementation with C++ std::string
- Contributed to Mozillas Firefox OS, worked in **C++** and **JavaScript**, work was focused on the alarm clock / timer app
- Solve Problems on leetcode periodically, see <https://leetcode.com/lainiwakura/>
- View Old Personal projects at <http://github.com/LainIwakura>
- I write articles on deobfuscating IOCCC (International Obfuscated C Code Contest) winners. My best article is the one where I deobfuscated and explained the workings of the first IOCCC winner from 1984 which was written for PDP-11 and VAX machines. It includes an interview with the original author. You can read it here: <https://lainsystems.com/posts/exploring-mullender-dot-c/>