

# Zach Easterbrook

FULL STACK SOFTWARE ENGINEER

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## Work Experience

### Wired Solutions

Windsor, ON

FULL STACK SOFTWARE ENGINEER

May 2020 - Present

- 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

**Languages** C#, HTML/CSS/JS, C++, C, Java, Python, Elixir, Erlang, Rust, VBScript, SQL, TypeScript, Dart.

**Frameworks** ASP.NET Core MVC, Angular 8+, ASP.NET WebForms, Django, Flutter, ReactJS, C++ STL

**Databases** MySQL, MariaDB, MSSQL, Informix, DB2, Redis, Pervasive, SQLite

**Operating Systems** OSX, 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>
- Periodically write articles on medium.com about debofuscating C code from IOCCC (International Obfuscate C Code Contest), planning to continue this series on my website when time allows