**Ghassan Karwchan** ghassan.karwchan@gmail.com

# Professional blog & Contribution

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| https://blog.gisspan.com | https://www.github.com/gkarwchan |

# TECHNICAL & SKILLS EXPERTISE

**Front End JavaScript development:**

**TypeScript, React, Isomorphic React, webpack, Jest**

Very strong front-end development experience, doing JavaScript for 18 years. Worked with many libraries, started with jQuery, and moved to Backbone, Angular, and ending with React, and Redux. Very familiar with many JavaScript build systems, like gulp, webpack.

**Back End Development:**

**Node.js, GraphQL, ASP.NET Core, MicroServices, REST services.**

More than 18 years’ experience building full stack applications, 5 years Node.js, and more than 16 years ASP.NET. Experience building microservice architecture.

**Cloud & DevOps:**

**AWS, Azure, Docker, Kubernetes, Serverless applications, Firebase**

Experience deploying applications on Azure & AWS using Kubernetes and Docker, scaling up application and performance using Kubernetes and Azure HPC (High Performance Computing).

Serverless applications, Infrastructure as code using Azure Resource Manager.

**Big Data, ElasticSearch:**

**ElasticSearch, Spark, Azure HDInsight.**

Experience building a search engine for a major corporation with ElasticSearch. Writing jobs for Spark running on Azure HDInsight.

**Continuous Integration:**

**Teamcity, Octopus, Jenkins, Python pip, Git.**

**GIS Development:**

**ArcGIS Desktop, ArcGIS Server, ESRI JavaScript API, Leaflet, Google Maps, ArcGIS Python scripting.**

# Education & Certification

B.Sc. in Electrical Engineer.

Microsoft MCSD & Several Courses on .NET

Oracle Certified Developer.

# CAREER EXPERIENCE

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| **ExxonMobil** | **Sep 2019 – Now** |

Full stack Developer:

Solely supported two applications and a machine learning job written in Python and run on Azure. Later I was involved in writing version 2.0 of staff and vendor management application.

**Main achievements:** Built the user interface for their staff management application, and built a scalable efficient Azure HPC (High performance computing) to run the ML job with maximum computing capability and scale down when unnecessary to save the cost.

*Technologies: React, .NET Core, Python, Azure, Azure High Performance Computing*

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| **RS Energy Group** | **Sep 2018 – Aug 2019** |

Senior Full stack engineer.

I maintained their flagship application, written in React and NodeJs. I wrote the query engine in that application using Typescript, and I was the main developer who built their build system using Webpack. Contributed to their main big data application using Scala, Spark and Azure HDinsigt.

*Technologies: React, NodeJs, Typescript, Spark, Scala*

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| **Shaw Communication** | **Apr 2017 – Sep 2018** |

Senior React and Node.js developer

Worked on Shaw Customer online website (MyShaw) using React and NodeJs. I established the deployment process using Teamcity and Octopus. Build common deployment tools using Webpack, and Gulp, and configured PM2 as the process manager for all NodeJs applications at Shaw.

Contributed with the team in building React 16, Redux and Redux-Sagas.

*Technologies: React 16, Webpack, Redux, Redux-Sagas, NodeJs*

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| **Fishtank Consulting** | **Dec 2015 – Feb 2017** |

Senior Full Stack Developer

I was the sole developer, architecture of a responsive web application, with Mobile first design, for a big medical clinic in Calgary, using Angular for front end, and Go for the backend, and built the deployment tools for deployment to the cloud (OpenStack) and built the code to do CI.

Built a continuous integration process using Teamcity, and Octopus

*Technologies: Go, Angular, OpenStack, Browserify, Gulp, Teamcity, Octopus.*

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| **Cortex Buisness Solution** | **Jun 2014 – Dec 2015** |

Senior Full Stack Developer

Worked on a large web application that is used by thousands of users from different companies.

I introduced Angular to the work boosting their front-end development process.

I transformed the major part of the UI functionality in their flag ship application, and I developed the two major enhancements to the same flag ship application during the time I worked there.

*Technologies: .Net, JavaScript, Angular, Biztalk.*

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| **Trans Canada** | **Dec 2012 – Jun 2014** |

Senior Full Stack & GIS Developer

Solely supported, and enhanced the two main engineering applications in TransCanada which are used by all engineers all over North America. Architected the new massaging backend that communicate with these two applications.

*Technologies: .Net, ArcGIS Extensions, ArcGIS Server, Silverlight, Java, JavaScript.*

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| **ESRI Canada** | **Feb 2012 – Dec 2012** |

Senior Full Stack & GIS Developer

Solely I created, and taught a brand new class at ESRI Canada, for developing progressive web mapping applications that work on mobile, and desktop. I lead development for many applications that distributed to many government organizations.

*Technologies: ESRI JavaScript API, Python, Silverlight, WPF, ArcGIS Server.*

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| **Cortex Business Solutions** | **Sep 2010 – Dec 2011** |

Senior Full Stack Web Developer.

I joined a very strong and enthusiastic team, building an enterprise online solution that is used by thousands of users. I was one of the main front end developers, and I wrote a jQuery plugin for highly customizable client-side grid, that allow to edit thousands of lines and run calculation on them.

I contributed to the whole team architecting and taking technical decisions.

*Technologies: ASP.NET MVC, JavaScript, jQuery, WCF with REST, Biztalk.*

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| **Shaw Communication** | **May 2009 – Sep 2010** |

Senior Full Stack Web Developer.

Helped architect, design and develop an enterprise, high-availability desktop application used by hundreds of Shaw custom support users. I build for that application the infrastructure that run asynchronous calls in background threads while not blocking the UI and can be cancelled.

*Technologies: WPF, WCF.*

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| **ERCB Board** | **Sep 2006 – May 2009** |

Senior Full Stack Web Developer.

My role was a senior .NET and GIS developer. Helped build two .NET GIS application using .NET and JavaScript. I helped established some design principle for the programming team, especially with multi-phase database transactions.

*Technologies: ASP.NET 2.0, ESRI GIS Server, Javascript, SQL Server 2005, WCF.*

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| **Telus Geomatics** | **Mar 2001 – Sep 2006** |

Full Stack Developer and Team Lead.

Main architect of the Automated Vehicle Location system (AVL), tracking vehicles in real-time through GPS units installed in the vehicles. The main Architect of Municipalities application to track infrastructure for many small municipalities across Alberta. I built my own framework which was similar to jQuery before jQuery, including my own XmlHttpRequest framework before Ajax become popular.

*Technologies: ASP.NET, JavaScript, XmlHttpRequest, Oracle Spatial, MapGuide, MSMQ.*