

**Professional blog & Contribution**

<https://blog.gisspan.com>

<https://www.github.com/gkarwchan>

**TECHNICAL & SKILLS EXPERTISE****Front End JavaScript development:**

**React, Isomorphic React, Redux, Redux-Sagas, Angular 2, webpack, Jest, Jasmine, gulp, TypeScript. jQuery.**

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.

**Big Data & Machine Learning:**

**Spark, Scala, Spark ML, Keras, Data science algorithms.**

Writing Scala jobs for Spark, running Spark on Azure, Keras machine learning, algorithms

**Back End Development:**

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

More than 18 years' experience building full stack applications, 2 years Node.js, and 1 year Go and more than 16 years ASP.NET. Experience building microservice architecture.

**Cloud Development:**

**Serverless development, AWS, Firebase, Google App Engine.**

Experience on AWS EC2, Lamda. And Firebase authentication, and real time database.

**Big Data & ElasticSeach:**

**ElasticSeach.**

Experience building a search engine for a major corporation with ElasticSearch.

**Continuous Integration:**

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

**GIS Development:**

**ArcGIS Desktop, Server Extensions, 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

### RS Energy Group

Set 2018 – Now

Senior Spark, and Full stack engineer.

Working with Spark, and Scala to build data analysis on Azure data lakes with terabyte of data. And doing machine learning on the data.

Maintain their website main flag product

*Technologies: Spark, Spark ML, Scala, React 16, NodeJs*

### Shaw Communication

July 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*

### City Of Calgary

Nov 2016 – Jun 2017

Senior Mobile and Full Stack Developer

Worked on the City Census Web and Mobile application. The application is built as responsive web app, and Mobile first design, using Backbone, jQuery Mobile, and Cordova for front end, and .NET for back end. Was responsible of delivering new functionalities for 2017 Census.

*Technologies: Cordova, Backbone, jQuery Mobile, .NET.*

### Fishtank Consulting

Dec 2015 – Nov 2016

Senior Mobile and 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.*

### 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, jQuery, Angular.*

## **Trans Canada**

**Dec 2012 – Jun 2014**

Senior Full Stack & GIS Developer

Almost alone, supported, and enhanced the two main engineering applications in TransCanada which are used by all users all over North America. One web applications using Silverlight and Asp.NET and REST services, and another .NET desktop application. Architected the new messaging backend that communicate with these two applications.

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

## **ESRI Canada**

**Feb 2012 – Dec 2012**

Senior Full Stack & GIS Developer

My main contribution was that I created, and taught a new class at ESRI Canada, for developing 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.*

## **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.*

## **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 built a WPF UI control that was used by many other projects at Shaw that. The control will run asynchronous calls in background threads while not blocking the UI and can be cancelled at the same time and was responsible of the parts that communicate with engineering system.

*Technologies: WPF, WCF.*

## **ERCB Board**

**Sep 2006 – May 2009**

Senior Full Stack Web Developer.

My role was a senior .NET and GIS developer. Helped build .NET GIS application that help ERCB audit and monitor oil production for oil companies. I built the GIS part, which find business rules according to the area, and I helped building the user interface with ASP.NET.

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.*

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. Shows location on real time, besides ability to playback on the map the track traveled anytime, and do reporting and statistics on many geographical details.

I built that applications when JavaScript was that popular, and I built my own framework to help unify DOM manipulation across many browser. I utilized XMLHttpRequest, which was the grandparent of Ajax.

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