# Jacob MacDonald

https://jaccarmac.com

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#### Skills

Most comfortable with Java, C#, Python, JavaScript, Clojure, Docker, Git, Linux, Emacs Lisp, Go Have worked with C, PHP, Common Lisp, HTML/CSS, Lua, Fossil, Windows, macOS, Android, React, Angular, SDL, AWS, Google Cloud Platform, TensorFlow, spaCy

## **Experience**

## Junior Developer at Stickman Ventures

August 2013 - Present

Created and maintained internal and client projects in a variety of technologies. Projects included

- A Progressive Web App utilizing Polymer/Firebase/Service Workers
- Applications for embedded and wearable devices, including Google Glass and Raspberry Pi
- An interactive e-commerce site utilizing WebGL on the frontend and PHP/SQL on the backend
- Experiments in getting unofficial languages running in a managed Google App Engine environment

# **Projects**

#### **Chronicled Partner Portal**

During the Fall 2016 Neumont quarter, three other students and I are working with Chronicled to create a partner portal for their business in the Enterprise Projects class. Responsibilities include:

- Adding functionalty to a React application with Redux and related technologies
- Self-organizing in a student team while working remotely with Chronicled, who are based in the California Bay
  Area
- Tracking project progress with code reviews and continuous integration tests

#### Paleothele informaticus

P. informaticus is my Neumont Capstone project. During the quarter the project took, I:

- Explored the uses of various types of neural networks on natural language and abstract syntax trees
- Helped get a Common Lisp GPU programming library running natively on Windows
- Ran TensorFlow calculations and visualizations from inside Docker containers

# quse-package

quse-package is an Emacs package containing a macro which composes two package management utilities for Emacs, quelpa and use-package. I use it extensively in my Emacs init file.

## **Creative App Engine**

Creative App Engine is a collection of tiny projects and talk created for a Google Developer Group event. The projects are demos of deployments to Google App Engine managed environments using languages which are not officially supported.

## **Drive My Car**

Driver My Car was a group projected completed for a web application class at Neumont. I worked on:

- Programming a wireless mircocontroller in Lua to receive and interpret commands
- Managing a queue of messages from a WebSocket connection and sending commands to the microcontroller
- Resolving version control (Git) and deployment (Heroku) issues

# **Education**

### Neumont University, Salt Lake City, Utah

B.S. Computer Science, GPA: 3.70/4

October 2014 - March 2017 (expected graduation)

#### Modesto Junior College, Modesto, California

Concurrent enrollment during high school, classes included

- Introduction to Computer Science
- Film Production

August 2010 - December 2013

- Speech and Debate