Russell McWhae

- russellmcwhae.ca
- russell.mcwhae@gmail.com
- 587-227-0022
- linkedin.com/in/rmcwhae
- medium.com/@rmcwhae
- github.com/rmcwhae

A full-stack web developer with an eight-year background in structural engineering and biomedical research, I'm passionate about designing beautiful websites and apps by channelling experience in photography and graphic design. Keen to challenge myself by learning and mastering new skills while collaborating with similarly inclined team members.

Skills

LANGUAGES
Javascript
Ruby
PHP
HTML5
CSS3
MATLAB
Microsoft VBA

FRAMEWORKS, LIBRARIES, & ENVIRONMENTS
NodeJS
ReactJS
Ruby on Rails
AJAX
Express
jQuery
SASS
Apache

SYSTEMS, CMS, & DATABASES
SQL
WordPress
Pico CMS
Git
Heroku

TESTING
Mocha/Chai
Jest
Cypress
Storybook
RSpec

CREATIVE SOFTWARE
Adobe Photoshop
Adobe Lightroom
Adobe InDesign
Adobe Illustrator

Projects

VISITER
Nov. 2019
An online emergency-room check-in service for parents of autistic children built for the 2019 Innovation 4 Health hackathon. Built with ReactJS and Ruby on Rails 5 (API mode).

PIRATE BATTLESHIP
Oct. 2019
A single-player Battleship clone with multiple difficulty levels. Built with Phaser 3, ReactJS, NodeJS, Express, and Socket.io.

JUNGLE RAILS
Sept. 2019
A basic e-commerce application. Built with Ruby on Rails, PostgreSQL, and Stripe.

INTERVIEW SCHEDULER
Aug. to Sept. 2019
An app that allows users to schedule, modify, or delete interviews from a list of available interviewers. Built with HTML, CSS, ReactJS, NodeJS, PostgreSQL, and WebSockets.

LISTIFY
Aug. 2019
A smart to-do list that automatically categorizes your tasks. Built with HTML, CSS, JavaScript, jQuery, NodeJS, and Express.

DUNN LEGAL SERVICES
Sept. 2013 to Dec. 2013
A professional website for a Calgary lawyer. Built with PHP, MySQL, HTML, CSS, and Symphony CMS.

Education

LIGHTHOUSE LABS — Calgary, AB
Web Development Boot Camp — Jul. 2019 to Oct. 2019
A full-time, full-stack web-development program covering topics such as JavaScript, React, NodeJS, PostgreSQL, and Ruby on Rails.

UNIVERSITY OF CALGARY — Calgary, AB
MSc. Biomedical Engineering 2019 — Sept. 2015 to Feb. 2019
Thesis: Intercellular Gap Junction Communication in the Bovine Annulus Fibrosus

ALBERTA UNIVERSITY OF THE ARTS (FORMERLY ACAD) — Calgary, AB
Graphic Design I Adult Credit-free Course — Apr. to June 2012

UNIVERSITY OF ALBERTA — Edmonton, AB
BSc. Civil Engineering (Biomedical Option) 2011 — Sept. 2007 to Apr. 2011
Graduated with Distinction

Employment

SNC-LAVALIN INC. — Calgary, AB
Junior Civil/Structural Engineer — Nov. 2011 to Jan. 2015, Mar. to July 2019
- Assisted civil and structural engineering effort for an estimated 46,000 barrels/day oil-sands processing facility while maintaining high client satisfaction in quarterly client-satisfaction surveys
- Designed steel and concrete structures via finite-element-analysis modelling software (S-FRAME) and manual calculations

ALBERTA ENVIRONMENT — Calgary, AB
Water Modeling Technologist — June to Aug. 2010
- Tested for bugs in a graphical-user-interface water-quantity modelling software package
- Documented issues with the software and presented them to contracted developers in meetings
- Wrote a user manual instructing new users on the program's interface and features

Awards

Government of Alberta · Queen Elizabeth II Graduate (Master's) Scholarship — Feb. 2016
BP Canada Energy Company Scholarship for academic excellence — Sept. 2010

Volunteering

CALGARY PUBLIC LIBRARY — Calgary, AB
Computer Coach — Apr. 2012 to Dec. 2014
English-as-a-Second-Language Conversation Club Coach — Jan. 2012 to Mar. 2013