# **Matthew Livingstone**

## Developer

Versatile developer with over 10 years of experience including full-stack web development, mobile applications, micro-controllers and embedded systems, as well as desktop applications. Involved in the requirements analysis, architecture/design, development, quality assurance, implementation, release, and support of products.

#### **Experience**

#### 2012 - BESTECH / SHYFTinc

#### Present *Developer*

- Current lead for embedded (Dialog Semiconductor SoC), mobile (Flutter), and back-end web architecture for new product development
- Helped design, build, test, deploy, and support enhancements to NRG1-ECO Ventilation Control Software, including development of a new auto code-generation engine for soft PLCs
  - Encouraged migration to web-based UI, RESTful APIs, and Git
- Involved in onboarding and training new hires and summer students
- Built multiple hybrid mobile applications, using Cordova and Flutter
- SAP Business Objects experience (WebIntelligence and IDT)

#### 2010 - Sunwire Inc

#### 2012 Developer

- One of the lead developers for their private branch exchange (PBX) system (Asterisk based)
  - Improved uptime and helped scale the system to support a call center with hundreds of employees
  - Improved login security and helped mitigate malicious access attempts
- · Wrote firmware for PIC micro-controllers:
  - To interface with Toothpick Bluetooth chipsets to communicate with mobile devices
  - That was combined with other hardware, and used to detect Rapid Eye Movement (R.E.M.) sleep

### 2008 - (Notable) Personal Projects

#### Present

- Currently building a thermostat using an Arduino, ESP8266, and LCD
- Plugin-based Telegram bot running on NodeJS on a VPS
- Source server RCON application for Android

#### 2008 - **MIRARCO**

#### 2009 Developer

- Helped develop mining data visualization application, ParaViewGeo
  - Developed new plugins, including a DXF reader
  - Improved existing plugins, with performance increases up to 50%
  - Setup and maintained build machines for testing

#### Personal Info

#### **Email**

mmrlivingstone@gmail.com

Website

mmrlivingstone.com

# Primary Languages and Frameworks

C#

.NET

JavaScript

AngularJS

NodeJS

HTML / CSS

#### Other Languages

C (Embedded)

Python

PHP

Java (Android SDK)

SQL

Go

### Other Technologies

TensorFlow Git, GitHub, Gitlab Subversion

# Education

**Laurentian University**Bachelor of Computer Science, with Honours (H.B.COSC.)