# **Michael Spencer**

St. Louis, MO • (636) 388-2144 • sonrisesoftware@gmail.com • https://mspencer.io

#### **Profile**

As a software craftsman, I enjoy using a wide variety of languages, frameworks, and tools to deliver high-quality and well-tested code that exceeds expectations. I've built mobile apps for Android and iOS, web app frontends in React, and backends in Python and Node.js. I've also worked on an embedded software project using Python, Rust, and Yocto. I'm always learning new things, ranging from Lisp, the second-oldest programming language still in use, to new languages such as Rust.

#### **Skills**

Languages Python, JavaScript, Kotlin, Java, Swift, Objective-C, Rust, QML

Web HTML, CSS, SCSS, React, Vue, Flask, Express

Mobile Android, iOS

Databases MySQL, MongoDB, PostgreSQL

Tools Linux, macOS, Git, Ansible, Docker, Vagrant, Yocto, AWS

#### **Experience**

#### Software developer, Lelander Remote | Oct 2015 - Present

I assisted in developing several Android and iOS applications. I created a group of internal web apps to improve business operations for the company using Node.js + Express, Python + Flask, AngularJS, and Aurelia. I built a couple of admin dashboards with React to accompany user-facing mobile apps. I developed software for an embedded project using Python and Rust, deployed the project as a Linux distro using Yocto, and set up remote troubleshooting and logging.

# Independent contractor Remote | Oct 2013 - Oct 2015

As a contract developer, I helped develop several mobile apps for iOS and Android. I wrote automated unit integration tests as well as behavior tests using Calabash. I also worked on a full-stack web app using Python, Flask, and Angular JS. I worked remotely, communicating via email, Skype, Slack, tickets, and screen-sharing sessions.

## Independent app developer, Sonrise Software (self-employed) | Mar 2013 - 2014

Designed and developed apps for the new mobile operating system Ubuntu Touch and published several apps for the Ubuntu desktop. Researched design and best UI/UX practices to provide a polished user interface. Used GitHub project management with Git version control and Travis CI. Wrote unit tests to ensure the quality and stability of my apps. Designed and developed a website to showcase my apps using Octopress and GitHub Pages.

## **Side Projects**

Oxide I've always enjoyed OS development, and Oxide is my latest iteration in Rust and a rewrite of my

previous C++ kernel. It has basic kernel features and a work-in-progress ELF loader for executing

programs and kernel modules.

Rasp is a small Lisp interpreter in Rust. It uses parser/combinators for S-expression parsing, and

provides lexical scopes, variables, function calling, and macro support.

Krunch A parser/combinator library written in Kotlin using infix notation, inspired by Haskell's Parsec

library.

Slip A static static generator in Common Lisp. This was my first foray into the world of Lisp, and had

two goals: use Lisp to provide a nice DSL for templates, and provide a single executable with no

external JS dependencies.

### **Education**

**Liberty University** | 2015 - 2018 (expected) BS, Business Administration: Leadership