# **Andrew Bennett**

https://github.com/potatosalad

P.O. Box 4 | Rexburg, ID 83440 +1 (678) 683-9280 | potatosaladx@gmail.com

30 September 2015

## **Personal Summary**

I am a polyglot developer from Georgia living in Idaho with my wife and our two little girls. I enjoy architecting distributed fault-tolerant and high-availability services and analyzing performance on everything from the operating system kernel level to the client-side applications themselves.

#### **Technical**

## **Expert**

- Programming
  - C, CSS, Elixir, Erlang, HTML, JavaScript, Ruby, Shell Scripting
- Frameworks
  - Angular, Erlang OTP, Ionic, pkgsrc, Ruby on Rails
- Operating Systems
  - SmartOS, FreeBSD, OS X, Linux (Arch, CentOS, and Debian/Ubuntu)
- Spoken Languages
  - English, Spanish

#### Intermediate

- Programming
  - Haskell, Rust
- Frameworks
  - autoconf, automake, BSD Make, GNU Make

#### **Basic**

- Programming
  - C++, Go, Java, Objective-C, Perl, PHP, Python, TypeScript
- Frameworks
  - CMake, Ninja
- Spoken Languages
  - Italian

## **Employment**

Freelance: WealthSmart America, LLC (remotely from Menan, ID)

Web Developer/Server Administrator, 2014-2015

Planned and developed the majority of the backend services and infrastructure for this insurance company. Developed financial reporting, commissions, and payments system. Developed carrier feed integrations for tracking insurance applications. Developed lead system and simple analytics for tracking lead phone calls and other agent interactions. Server setup involves multiple intercommunicating SmartOS hosts which have been configured for high-availability. Multiple front-ends built with Angular which communicate with a common API.

## Accomplishments

- Technologies employed: Angular, C, Erlang, Elixir, MongoDB, Node.js, Redis, Ruby on Rails, SmartOS
- Open Source
  - Erlang and Elixir JOSE RFC library (JWA, JWE, JWK, JWS, JWT)
     https://github.com/potatosalad/erlang-jose
  - Erlang Lightweight FTP Client https://github.com/potatosalad/lftpc
  - Erlang Joyent Manta Client https://github.com/potatosalad/erlang-manta
  - Erlang RSASSA-PSS Public Key signing algorithm implementation https://github.com/potatosalad/erlang-crypto\_rsassa\_pss
  - Erlang and Elixir HTTP Signature Scheme library https://github.com/potatosalad/erlang-http\_signature

### Freelance: Americo Manufacturing Company, Inc (remotely from Menan, ID)

Mobile App, Web Developer/Server Administrator, 2014-2015

Planned and developed the backend services and infrastructure for this floor mat and floor pad manufacturing company. Developed mobile app using the Ionic framework. Developed admin panel and API service for administering the content available in the app.

### Accomplishments

- Technologies employed: Angular, Ionic, Node.js, PostgreSQL, Ruby on Rails, SmartOS
- Mobile app in stores
  - Android https://play.google.com/store/apps/details?id=com.pixid.americo.lakecityiOS
    - https://itunes.apple.com/us/app/americo/id1033321914

#### Pagoda Box, Inc (Rexburg, ID)

Erlang, Kernel, Web Developer/Server Administrator, 2012-2014

Planned and developed several key pieces for this cloud hosting provider. Specialized in distributed/fault tolerant systems, Solaris/illumos based operating system internals, low-level and cloud level analytics and metrics, service discovery, and internal service messaging systems.

## Accomplishments

- Technologies employed: C, Erlang, cowboy, ct, riak\_core, mnesia, SmartOS, DTrace, mdb, Ruby on Rails, JavaScript, OpenVZ, CentOS, Ubuntu, Debian, Arch Linux (and many, many more)
- Kernel development on the illumos kernel using C and other technologies.
- Open Source
  - Erlang and JavaScript WebSockets pub/sub group of services known as stormpack.
    - https://github.com/stormpack-core
  - C driver for Erlang for reading solaris/illumos kstat metrics.
     https://github.com/potatosalad/ekstat
  - Research and development of custom networking kernel drivers for SmartOS, packaging, bootstrapping, and building processes. https://bitbucket.org/pagodagrid-smartos
  - Ruby libraries for converting binary Erlang External Term Format to Ruby and back.

```
https://github.com/potatosalad/erlang-etf
https://github.com/potatosalad/erlang-terms
```

## **Delorum/Rejuvenation, Inc** (Rexburg, ID; Portland, OR)

Web Developer/Server Administrator, 2011-2012

Developed current website from wireframe drawings. Connected customer facing website to legacy warehouse software for designing 3D models of lighting fixtures in the browser. Setup hosting and deployment environment.

#### Accomplishments

- Technologies employed: Ruby on Rails, MongoDB, Redis, nginx, Linux, Microsoft Dynamics AX, BatmanJS
- Several backend system integrations were very heavily XML based.

#### The Church of Jesus Christ of Latter-day Saints (Las Vegas, Nevada)

Missionary, 2008-2010

Learned importance of accountability and leadership skills, particularly in a remote work environment.

### Accomplishments

- Became fluent in Spanish.
- While serving in an office position gained additional experience with networking, Excel, and Access.

#### **MyStock, Inc** (Kennesaw, GA)

Web Developer/Server Administrator, 2006-2008

Mid-range stock photography company started to capture the niche market between Getty Images and iStockphoto. Getty Images eventually acquired iStockphoto and later MyStock to merge the two businesses.

## Accomplishments

- Technologies employed
  - Web Framework related: Ruby on Rails, HAML, SASS, ¡Query
  - Web Server related: Apache httpd, nginx, mongrel, Pound
  - Other: FreeBSD, PostgreSQL, git

## Liberty Title Company, LLC (Kennesaw, GA)

Internal Web Developer, 2006

Developed internal reporting system for legacy Mortgage software based on legacy SQL Server.

## Accomplishments

• Technologies employed: Ruby on Rails, MSSQL, FreeBSD, SVN

## **Education**

## Brigham Young University - Idaho

Physics, 2010-2013

### **Kennesaw State University**

Physics, 2006-2007

## References

Available on request.