

Resume of Glenn T. Barry

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1 Description

Seeking a software development position in Atlanta (or remote) utilizing my skills and job experience detailed below.

2 URLs for this Resume

2.1 Web site: <https://gaak99.github.io/resume>

2.2 Raw formats including plain text: <https://github.com/gaak99/gb-res>

3 Contact

3.1 email: gaak99@gmail.com

4 Computing Technologies

4.1 [Github](#)

4.2 Languages

4.2.1 Bash

1. *autogen.sh* fix for Remacs project [github pull request](#)
2. *oxmerge* is a shell wrapper for the *oxly* common case [github](#)
3. see also Emory [below](#)

4.2.2 C

1. see Sun Microsystems [below](#)

4.2.3 Lisp

1. Clojure
 1. Concurrent recursive "grep" using *Clojure.core.async* Go-style channels [github](#)
2. Basic bloom filter implementation in Emacs Lisp [github](#)

I used the [dash](#) uber modern/functional Lisp list library.

4.2.4 Python

1. *oxly* auto-merges Dropbox file revisions with a *git*-like CLI [github](#)

The side project that I put the most time into and use on a regular basis.

2. see also Seagate [below](#)

4.2.5 Rust¹

1. Remacs open source project - "oxidize" (port) C layer of GNU Emacs to Rust [github](#)

I ~~ported~~ re-wrote several low level directory/file functions from C to Rust.

I contributed 98% (as of Aug '18) of the code in the dired Rust files.

I used some functional style Rust features here in [dired unix.rs](#) (see function *fattrs to list* (replace each *spc* with *underscore*)).

4.3 Operating Systems

4.3.1 Unix

1. Ubuntu Linux

My dev laptop runs Ubuntu 16.04. See also Seagate [below](#).

2. Solaris / OpenSolaris

See Sun Microsystems [below](#).

3. SmartOS

This cloud optimized derivative of OpenSolaris has some unique features for cloud devops such as DTrace.

4.4 Web Frameworks

4.4.1 Flask

1. see Seagate [below](#)

4.4.2 Django

1. see MeetMeTix [below](#)

4.5 Cloud Services

4.5.1 AWS S3 API

1. see Seagate [below](#)

4.5.2 Dropbox API

1. oxly side project [github](#)

4.5.3 FaunaDB² Service API

1. *ATL100* side project [github](#)
2. *hylisp* side project [github](#)

4.5.4 Openstack Swift object storage API

1. see Seagate [below](#)

4.5.5 rsync.net

1. ZFS as a Service

It's one of my favorite backup services as not only does it provide a familiar Unix file system interface (via sshfs) but also provides read-only snapshots several times a day.

5 Job Experience

5.1 June 2013 - June 2015, Seagate/Evault, San Francisco, CA.

I was one of the first engineers hired to this project that started as a skunkworks within Evault – a wholly-owned subsidiary of Seagate – and last half of my tenure there we were brought into Seagate for the new Cloud Storage division.

It was run like a startup using Agile methodology and Jira/Confluence/Stash (git server).

5.1.1 Software engineer, Cloud Storage R&D Group.

1. The product
 1. LTS2.evault.com - cheaper and faster retrieval (vs AWS Glacier) of long-term object storage

The service was based on Openstack Swift³ object storage open source project.

Swift is many thousands of lines of Python 2 and is heavily object oriented. And the code tends to be of high quality as it has many eyes of Python experts for code review.

Swift runs on a Ubuntu cluster (we had one cluster in Salt Lake City and later added a second one in Oklahoma City).

All cluster inter-node messaging was RESTful and gave me a good (sometimes intense) experience debugging these type services including down to the Python *WSGI* module.

A teammate wrote a custom user/customer DB that the other services accessed using SQLAlchemy.

My projects:

1. I "owned" Swift AWS S3 emulation module aka fixed many bugs
2. Data center to data center object replication performance improvements
3. Basic web services with Python Flask - password reset, etc.

5.2 Sep 2012 - Jan 2013, MeetMeTix.com, Atlanta, GA.

5.2.1 Contract programmer, Python/Django Web Apps.

1. Major Projects:

1. Single sign-on for the site

Integrated/tested/refined Django-Social-Auth app for Facebook single sign-on feature.

2. Developed (Python) from scratch a full Selenium automated test suite.

5.3 Oct 2001 - Jun 2012, Sun Microsystems (acquired by Oracle in 2010), Menlo Park, CA.

5.3.1 Software engineer, Solaris OS/Net Security Technologies.

1. Last few projects:

1. Solaris secure boot feature

Refined initial design with an emphasis on next generation SPARC systems.

2. Diagnosability improvements of Solaris Secure NFS/SMB (C development)
3. Kerberos KDC server db replication (C development)

I led team and co-designed/developed RPC-based DB replication protocol/feature for the Kerberos KDC.

4. Solaris kernel RPC GSS modules server performance improvements (C development)

5. Solaris single sign-on via GSS/Kerberos (C development)

5.4 Oct 1996 - Oct 2001, Sun Microsystems.

5.4.1 Software engineer, Solaris Sustaining OS/Net Name Services.

1. Diagnosed/coded/tested fixes (C language) for escalated bugs.

5.5 June 1987 - Sep 1996, Emory University MathCS Dept, Atlanta GA.

Unix Systems Administrator.

6 Education

June 1981 - 1987, Georgia Tech, BS in Information and Computer Science.

Footnotes:

¹ [Wikipedia](#)

Rust is a systems programming language sponsored by Mozilla which describes it as a "safe, concurrent, practical language", supporting functional and imperative-procedural paradigms. Rust is syntactically similar to C++[according to whom?], but its designers intend it to provide better memory safety while still maintaining performance.

² [Infoq](#)

FaunaDB is a transactional, temporal, geographically distributed, strongly consistent, secure, multi-tenant, QoS-managed operational database. It's implemented on the JVM for portability, and it's relational, but not SQL. Instead, it's queried via type-safe embedded DSLs, like LINQ. FaunaDB is a return to the general database purpose model, but built for the cloud instead of the mainframes of the 80s.

³ [Openstack Wiki](#)

The OpenStack Object Store project, known as Swift, offers cloud storage software so that you can store and retrieve lots of data with a simple API. It's built for scale and optimized for durability, availability, and concurrency across the entire data set. Swift is ideal for storing unstructured data that can grow without bound.

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