

Joshua Kugler  
PO Box 82229  
Fairbanks, AK 99708  
907.388.1940  
[joshua@azariah.com](mailto:joshua@azariah.com)

- Job Objective:** I am looking for a job which will utilize my experience, especially in the areas of software development, database design, programming, and administration, and systems administration, as well as teach me many new skills.
- Education:** 1999 Graduate, University of Nebraska, Lincoln, Independent Study High School (3.84 GPA) Pursuing a MS in Computer Science at University of Alaska Fairbanks (currently on hold)

## **Experience:**

### **DevOps Engineer - New Context - 2015-10 - 2018-05**

Maintain infrastructure for clients. Use Chef, Test Kitchen (including kitchen-terraform), ChefSpec, Chef Server, Terraform, and associated tools to create and maintain code which manages the infrastructure used by New Context's clients.

### **Python Programmer/Web Application Developer (Contract) - eWinery Solutions - 2015-05 - 2015-10**

Designed and contributed improvements to their deployment system. Helped design and implement the "ground breaking" of the Python REST API application that would move their legacy application toward a JavaScript/API driven application. Assisted in developing a standard VM image for developers to use as their development/testing platform (using Vagrant and Ansible).

### **Dev/Ops Lead - Whamcloud/Intel - 2011-12 to 2015-08**

Maintain servers for HPDD code repository/code review, bug tracking, wiki, test result tracker, build farm, and test lab. Maintain four clusters comprising over 200 physical machines and over 1100 virtual machines. Configured and provisioned via Cobbler, PXE booting, and Chef. Hardware upgrade research, sizing, planning, purchasing, and roll-out.

### **Senior Developer - CRC Health - 2010-02 to 2011-11**

Maintained an architecture (hardware and code) which supported over 300 web sites: version control and automated deployment. Various projects including system upgrades, programming, and system monitoring. Site maintenance and scripting, including ETL programming. Documented several previously-undocumented systems and applications.

### **Web Application Server/Python Web Services Architect - WordStream - 2008-11 to 2009-04**

As a contractor, had roles of system administrator, framework architect, application programmer, and database administrator. Scheduled and coordinated planned outages, and implemented monitoring.

### **Python Developer (WSGI web framework/back end) - S&K Aerospace - 2007-11 to 2008-10**

Designed and coded applications and unit tests for the in-house WSGI framework. Also wrote various utilities: scripts to take SQL dumps and turn them data-dictionaries, dependency graphs, and Python and JavaScript CRUD frameworks. Designed and coded functional and integration tests. Linux and Windows system administration.

### **Lead System Administrator and Senior Programmer - EE Internet - 2006-05 to present**

Daily maintenance of servers, as well as maintenance of in-house scripts and applications. Designed and implemented applications (python and perl) for weather and environmental data processing, current conditions reporting, and graphing (see <http://photizo.eeinternet.com/>). Successfully argued for the use of wikis in project documentation, then researched, planned, and implemented a "wiki farm" for creating information repositories for both internal and external use. Planned and executed migrations of: Approximately two dozen domains from an aging Apache 1.3 server to an Apache 2 VMWare guest; DNS service off of two aging machines to new VMWare guests; Sendmail/SpamAssassin based system to a Postfix/Dspam

based system; Restructured network from a simple NAT box and servers exposed to the Internet to everything behind a firewall.

### **System Administrator - UAF Center for Distance Education - 2004-09 to 2006-05**

Created and executed a plan to replace an aging and broken backup system with an open-source, cross-platform backup solution (Bacula). Administered 15 servers of various kinds (storage, web, database (MySQL), backup), both Linux and Windows and supported 20+ user desktops. Performed small programming and scripting projects as required. Was responsible for spec'ing out, purchasing, assembling, and installing new servers. When storage was needed, researched, recommended, acquired, and implemented storage servers providing a total of 20.4TB of storage space (Coraid AoE), which back then was actually a big deal.

### **Information Services Director - Associated Students of UAF - 2000-02 to 2004-08**

Was hired into a new position, so was responsible for setting department policy, duties, and precedent. Did Linux and database administration. Rewrote their legislation tracking database as an MS Access front end/MySQL back end system. Was responsible for designing, coding, and implementing, for the ASUAF elections, the first online voting system in the state.

### **Computer Technician/Database Programmer - Hunt Foods Company - 1998-1999**

Was initially hired to do meter reading and reports. Upon demonstrated aptitude in other areas, was tasked with inventorying for Y2K equipment replacement, setup and maintenance of production floor workstations, maintenance and extension of various in-house MS Access database applications, Excel and Access development, and co-administration of Windows NT servers.

### **Proficiencies and Experience**

Python, Perl, Linux administration (Ubuntu, Debian, CentOS, Redhat, SUSE), Apache, Bacula, LigHTTPd, Postfix, PostgreSQL, SQLite, MySQL, Database design, Subversion, Trac, Redmine, Git, Bind (and DNS admin), (X)HTML, TCP/IP and Ethernet Networking, ATA-over-Ethernet, Buildbot, Jenkins, JIRA, Confluence, Gerrit, Chef, Linux KVM and libvirt, Cobbler, Conman, Powerman, Slurm, NFS, NIS, FreeIPA, CherryPy, Munin, Mon (<http://mon.wiki.kernel.org/>), Nagios, Salesforce API, Google Adwords, Yahoo Search Marketing (now MS AdCenter), Web Services, JSON, REST, XML, SOAP, VMWare Server, some PHP and C/C++, AWS, CloudFoundry, Chef, ChefSpec, Kitchen, ServerSpec, Terraform

### **Licenses, Certifications, and Training**

- 20 year clean driving record. Hold Alaska Driver's License.
- Leviton One-day Cat5 Cable Installer Training and One-day Fiber Optic Installer Training
- Have held a US Government Security Clearance
- No arrests, DUI's/DWI's, or other infractions

### **Papers**

#### **10,001 (Or More) Polling Stations: Voting Virtually @ UAF**

<http://jjncj.com/papers/VotingVirtually.pdf>

#### **Improving Open Source Software with an Object Oriented Design Model**

<http://jjncj.com/papers/OOD.pdf>

#### **Using the UA Web: Observations, Suggestions, and Comparisons**

<http://jjncj.com/papers/UAWebUsability.pdf>

### **Open Source Involvement and Projects**

- Recognized MySQL Community Contributor
- Two patches accepted by the Buildbot project, one of them a new feature
- Minor contributions to rst2pdf (<http://code.google.com/p/rst2pdf/>)
- Bugfix for OWFS's Python module (<http://sourceforge.net/projects/owfs/>)
- Feature addition for two Munin plugins

- Contributions to Salesforce Python Toolkit (<http://code.google.com/p/salesforce-python-toolkit/>)
- E-mail and dspam utilities: <http://www.eeinternet.com/opensource.html>
- AWStats Cache File Reader: [https://github.com/jkugler/awstats\\_reader](https://github.com/jkugler/awstats_reader)
- CDC Data Collector: A sensor reading framework [https://github.com/jkugler/cdc\\_data\\_collector/](https://github.com/jkugler/cdc_data_collector/)

### **Volunteer and Community Experience**

2011-Present Serve on the advisory board for the University of Washington Certificate in Python Programming

2001-2003 Served on the Technology Advisory Board at UAF, which distributes student TAB fees to be used for innovative technology in education.

2000-02,06,07 Served as a judge for the yearly Home School Science Fair

2003/2004 President of the University of Alaska Fairbanks Linux User's Group

### **Miscellaneous Highlights**

Fall, 2002 Nominated by the students of UAF for, and appointed by the Governor to, the position of Student Commissioner for Post Secondary Education, a position with the Alaska Commission on Post Secondary Education.

Fall, 2002 Participant in the first web-based Computer Science graduate course at UAF

Spring, 2003 Invited by the Chair of the UAF Department of Math and Sciences (DMS) to be the student representative for DMS at the UAF College of Science, Engineering and Mathematics planning retreat

Spring, 2004 Appointed by UAF President Hamilton to sit on the University of Alaska Ad Hoc Committee for Accountability and Sustainability, a group convened to make UA more efficient and cost effective.