

I am a seasoned, highly disciplined software engineer with practical experience seeking new and interesting opportunities in backend systems programming or devops. Please do not hesitate to call!

Employment History



IO Datacenters

Senior Cloud Engineer

Oct. 2014 - Sep. 2015

San Jose, CA

Founded in 2007, IO provides the data center as a service to businesses and governments around the world.

- Developed on all major components of IO's future Cloud product. Focused on using SaltStack to declaratively network boot and provision Arch Linux nodes into OpenStack storage and compute clusters.
- Lead of build systems, with rigorous focus on determinism, release, and version tracking of the Linux software components that compose the product.
- Completed 309 of team total 603 pull requests over 42 weeks across all internal software components, primarily Python, Jinja/yaml, Shell, and Ruby.
- Published 3 Python Open Source projects through the course of work, as well as authoring a number of bug fixes upstream to projects such as vagrant and salt.



RiverMeadow Software

Senior Software Engineer

Oct. 2013 - Oct. 2014

San Jose, CA

Founded in 2009, RiverMeadow provides cloud migration SaaS that automates the migration of live physical, virtual and cloud based servers into target cloud environments.

- Developed on all major components of cloud migration software, which migrates Linux and Windows compute instances between all major providers, AWS, Openstack, vCloud, vSphere, using languages Python, Java, and Shell.
- Most senior expert of team at time of departure. Managed code repositories, builds, packaging, branching and release strategies, and testing infrastructure in addition to writing the software with the team.



Jackson National Life Insurance
Web Developer

Apr. 2012 - Jan 2013
Lansing, MI

Founded in 1961, JNLI offers annuities for retail investors and fixed income products for institutional investors.

- Engineer High Availability solutions for Java platforms using Apache and Linux. Automation, monitoring and tooling for BEA WebLogic, jBoss, and Apache HA systems and their hosting applications.
- Developed record keeping & reporting software of web server farms in Python, extensions to Interwoven Teamsite in Perl, and various infrastructure management tools.



JSTOR
Software Developer

Sep. 2008 - Dec 2011
Ann Arbor, MI

Founded in 1995, JSTOR digitized and provides full text searches of 2,000 journals spanning 55 million pages.

- Engineered Python API for Journal archive metrics and information extraction with over 100 demonstrating tools and utilities providing business value.
- Developed a Solaris-based cloud and lifecycle management software for “zones”, focused on imaging, migration, duplication, data retention and disaster recovery for ZFS storage.
- Developed several Jira tools, LDAP and account management tools, various plugins and data reporting systems in Java, C, Python, and XSLT languages.



General Motors
Software Developer

Oct. 2005 - Sep 2008
Detroit, Michigan

GM is an American multinational corporation headquartered in Detroit, Michigan, that designs, manufactures, markets and distributes vehicles and vehicle parts and sells financial services.

- Developed interactive Bolt placement tools for the Abaqus/CAE software suite in Python and C++ as part of the *Finite Element Analysis* group.
- Developed LotusScript code static analysis tools for the Lotus Domino Server, and various high-throughput network scanners for Windows Systems using Python, C++, Win32 COM, WinNT WMI for the *North America IS&S Operations* group.
- Developed Java, LDAP, and Oracle identity audit tools, as well as business organization analysis software in Python for the *Identity Management* group.



Baker College
Tutor - Computer Info. Systems

Sept. 2002 - May 2005
Flint, MI

- Tutored college courses to individuals and groups on an appointment basis, focusing primarily on Perl/CGI, C++, Unix Administration and Shell scripting. Additional languages tutored: RPG IV, .NET, Python, Java, SQL.
- Also attended as a student towards an Associates in Unix Systems Administration.
Did not finish.



Open Source Work

2008 - Current

I author, maintain, or co-maintain several open source products. My open source work reflects my quality of standards, rapport, documentation, contributing guidelines, static analysis, continuous delivery and release management.

- pexpect: Downloaded over 70K times per week, pexpect is a Unix automation library depended upon by well known applications such as PyCharm or SageMath since 2002. I took over maintainership along with Thomas Kluyver, an IPython contributor, to add Python 3 and Unicode support in 2011, later becoming the new project owners.
- wcwidth: Determine the printable width of wide unicode characters on terminals, especially important for the CJK (Chinese, Japanese, Korean) family of Unicode characters, wcwidth is being used in a variety of command line tools and editors, such as pymux, pyvim, aws-shell.
- blessed: A thin, practical wrapper around terminal styling, screen positioning, and keyboard input. blessed is used in a wide variety of software, such as the AWS EB Elastic Beanstalk CLI. Ned Batchelder, author of coverage.py, said, "*I'm delighted to continue to find little gems like **blessed** [...] They demonstrate the craftsmanship that Python developers bring to their work, and a dedication to making tools that help others.*"
- telnetlib3: Telnet Client and Server Protocol library (asyncio). This implements 21 RFC standards as python code. Guido Von Rossum, author of the Python language said, "*Wow. Jaw-dropping wow.*" regarding the completeness of the specification.

I have also made a number of minor contributions to open source projects:

[astroid](#), [asyncio](#), [blessings](#), [box-cutter](#), [ec2-api-tools-rpm](#), [homebrew](#),
[openbsd](#), [packer](#), [paramiko](#), [pip-accel](#), [prospector](#), [pyformat.info](#),
[pyinstaller](#), [pylint](#), [pytest-cov](#), [saltstack](#), [sh](#), [sqlitedict](#), [vagrant](#).

Additional references are available at my public LinkedIn profile:

<https://www.linkedin.com/in/jeffreyquast>