



# Joseph Anthony Pasquale Holsten

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## Skills

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### Programming Languages

Significant experience with Ruby, Portable Bourne Shell, Go & JavaScript. Some experience with C, Python, SQL & Java. Merely dangerous in Scheme, Haskell & Erlang.

### Operations

Significant experience with Continuous Delivery (Jenkins, Rundeck, Travis), Containers (Docker, Illumos Zones), Service Discovery (Consul, custom), Configuration Management (Chef, Puppet, Ansible), Network Monitoring (Sensu, Nagios, Server Density), Metric Timeseries (Graphite, Librato), Log Management (Logstash, Rsyslog, Papertrail), HTTP Servers (Apache, Nginx) & Queue Brokers (RabbitMQ, Kafka, Redis). Some experience with Firewalls (IPFilter, IPF), Relational Databases (PostgreSQL, MySQL, SQL Server). Merely dangerous with Hadoop, Cassandra, LDAP, VPN, Intrusion Detection & Single Sign On.

### Web technologies

Significant experience with HTTP, REST, HTML, DOM & XML. Some experience with CSS & SAX. Merely dangerous with RDF, SOAP & WSDL.

### Operating Systems

Significant experience with UNIX (Debian, RHEL, OS X, Illumos). Some experience with Windows (Server 2012 R2). Want excuses to play with Plan 9 & IBM i (née AS/400).

### Software engineering

Significant experience with model-view-controller, test driven development, continuous delivery & queueing. Some experience with evented concurrency, key-value databases & document databases.

## Experience

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### Software Engineer, Private Internet Access

2017-08 – 2018-03

- Maintain existing VPN network infrastructure of over 3000 physical servers in 45 separate datacenters using homegrown configuration management, deployment and monitoring tools.
- Design failure detection service using prometheus and grafana to replace homegrown monitoring.
- Deploy gitlab and gitlab ci to replace homegrown source code management.
- Develop incident response procedures.

### Software Engineer, Lovable Technology

2017-03 – 2017-07

- Contracted with Oracle to implement a Go SDK and Terraform Provider for Oracle Bare Metal Cloud.

### Infrastructure Engineer, Ensign

2014-11 – 2017-03

- Infrastructure buildout, maintenance, & automation: Collaborated with infrastructure and product engineers to maintain ~1300 servers using Terraform for provisioning, Puppet for platform config & Ansible for deployment. Servers were spread across 14 datacenters/regions, from 3 cloud providers and 1 non-cloud provider.
- Monitoring: Built server monitoring service to support cross-region availability and autoscaling clusters using Sensu & Graphite.
- Secondary DNS for Geo-Targeted Services: Converted ~2000 records for 12 datacenters from manual configuration in UltraDNS to configuration-as-code with support for both UltraDNS & NS1. Implemented the UltraDNS & NS1 providers for Terraform, and a Nagios-compatible monitoring plugin to check for divergence.
- Tooling development: Implemented & maintained UltraDNS and NS1 Terraform providers in Go (now included the official release), Nagios/Sensu plugins in Ruby, and assorted work in Python, Java, Node.js, Groovy & PHP.

### Infrastructure Engineer, Simply Measured

2012-02 – 2014-08

- Infrastructure buildout, maintenance, & automation: Designed, built and maintained systems to run internal applications and support services.
- Maintained ~500 servers and ~50 internal applications, averaging a 150 server-to-admin ratio.
- Metrics & reporting: Provided services for measuring and reporting performance and usage of internal applications.
- Education: developed, maintained and trained in procedures for using infrastructure and internal support services. Developed ~100 standard operating procedures and supported ~45 engineers.
- Emergency response: developed and maintained on-call processes for engineering teams to respond to their respective application and infrastructure failures.

### Founder, Operations Engineer, Bitp.it

2011-02 – 2011-08

- Developed, implemented fully automated deployments using Git, Chef
- Ran a node.js service on a single no.de server handling over 400 requests per second
- Ran a bitcoin mining pool at 100 GHash per second

## Senior Engineer, Waterfield Technologies, Inc

2007-04 – 2011-09

Developed, implemented fully automated deployment strategies using VMWare, Git, Chef, & Capistrano  
Developed banking & energy sites using SharePoint, ASP.NET, Ruby on Rails  
Automated testing, continuous integration site monitoring with Cucumber, RSpec, NUnit, CruiseControl  
Developed a content publishing service with [JSON](#), [HTML](#) & SOAP interfaces

## Engineer, Mobicentric

2009-10 – 2010-08

Developed a mobile real estate listing service for real estate agents  
Optimized a pure ruby API client to process ~6000 listings & ~60000 images per day on a single Heroku worker, over 10x more throughput than the vendor's standard client.

Further experience available upon request

## Open Source & Community Contributions

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Most of my open source contributions are visible at GitHub, notable contributions include:

Founder, Sous Chefs	2015 – Present
Contributor, terraform [UltraDNS, core]	2014 – Present
Contributor, glibc [commitdiff]	2014
Contributor, go [commitdiff]	2013
Contributor, OASIS [XRD]	2008 – 2010
Contributor, IETF [Disco, About:]	2009
Contributor, OAuth Extensions [Session, Language, Scalable]	2008
Contributor, Ruby on Rails [XmlMini]	2008

## Presentations

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Sous Chefs - Fostering Better Community Cookbooks, Chef Conf [video]	2017-05-24
Sous Chefs, Food Fight Show [video]	2017-01-06
Saturday Night Disco on Monday Morning, DevOpsDays Austin [video, slides]	2014-05-06
Becoming Fearlessly Definite & Resourceful, ChefConf [video, slides]	2014-04-17
Services in Go: from Proof-of-Concept to Production, GolangVan [video, slides]	2014-02-05

## Education

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BS Computer Science, Oklahoma State University Tulsa, <a href="#">OK</a>	2005 – 2010
Cisco Network Academy, Tulsa Technology Center, Tulsa, <a href="#">OK</a>	2002 – 2003

## Interests

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Augmented Reality, Digital Contracts & Reputation  
Community Organizing, Volunteering & Open Source

## References

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Available upon request