

# Mike Shade

Cloud Infrastructure | Automation | Reliability

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## SUMMARY

Cloud focused DevOps engineer with a passion for automation, reliability, and solving complex problems simply. I take pride in communicating effectively to audiences of all types, distilling complex ideas down to their essence. I bring more than 10 years of experience designing infrastructure and successfully supporting many kinds of production workloads and technologies.

## EXPERIENCE

### Forum One, Alexandria, VA

A full-service web design and technology consulting firm  
*Sr. Systems Administrator | April 2011 - Present*

- Design highly available, scalable infrastructure for PHP / Python / Django / Node / Docker-based applications on AWS
- Decrease time required to manage, deploy, and maintain infrastructure with CloudFormation, SaltStack, and Puppet
- Develop and support workflow with Docker and Vagrant for continuous delivery pipeline via Jenkins
- Participate in agile Scrum development methodology
- Advise clients on infrastructure management, planning, and scaling
- Provide solution guidance to business development team
- Client-facing support, consulting, and incident response
- Manage internal IT staff, provide career development mentorship, and technical guidance

*Systems Administrator | April 2007 - 2011*

- Supported cloud and dedicated infrastructure for hosting of Drupal / Wordpress / PHP sites
- Participated in on-call rotation
- Managed dedicated and cloud servers
- Vendor management
- Managed internal IT operations

### Omniplex World Services Corporation, Chantilly, VA

Provider of investigative and security services to public and private sector.

*Technical Support Specialist | March 2006 - April 2007*

- Supported secure operations of country-wide fleet of IT systems
- Help Desk support
- IT lifecycle support and management

## SKILLS

### Platforms

Linux of all breeds  
AWS / GCP / Rackspace Cloud  
Docker w/ ECS and ElasticBeanstalk  
Vagrant / KVM / VMWare

### Orchestration / Management

SaltStack (certified engineer)  
Puppet  
CloudFormation  
ElasticBeanstalk  
Log Aggregation, Metrics with GrayLog / CloudWatch  
Jenkins CI/CD

### Databases

MySQL  
PostgreSQL  
ElasticSearch  
Apache Solr  
RDS

### Caching / HA / Delivery

Varnish / Nginx / Apache  
Redis / Memcached / ElastiCache  
HAProxy / ELB / ALB  
CDNs: CloudFlare / Fastly / CloudFront

### Programming / Tools

Bash, advanced, +10 years  
Python, intermediate, +3 years  
Perl, intermediate, +5 years  
PHP, intermediate, +10 years  
Git / Source Control

### Foundational

DNS / Route53  
SMTP / SES  
LAN / WAN Networking / VPC  
Firewalls / iptables / Security Groups

## NOTABLE PROJECTS

### Peace Corps

*Infrastructure Design, Administration* | 2016 - Present

<https://www.peacecorps.gov/>

Django / Wagtail CMS application hosting

- Design and implementation of auto-scaling and highly available infrastructure to host high profile Python application
- Support ongoing operations
- Ensure FISMA compliance of hosting environment
- Support continuous integration and deployment pipeline

### Center for Strategic and International Studies

*Infrastructure Design, Administration* | 2010 - Present

<https://www.csis.org/>

Drupal Application hosting for client with large volumes of high profile content and media

- Design and implementation of auto-scaling and highly available infrastructure to host Drupal application.
- Support growing patterns of international traffic
- Tiered caching strategy comprised of edge CDN, Memcached, and Database layers
- Support continuous integration and deployment

### County Health Rankings and Roadmaps

*Infrastructure Design, Application Support* | 2008 - Present

<http://www.countyhealthrankings.org/>

Multi-technology application presenting impactful and highly publicized public health data

- Multiple iterations of infrastructure, from single and multi-instance, to auto-scaling AWS platform to handle yearly spikes
- MapBox / TileMill stack for map production
- AngularJS single page application
- PHP (Laravel) API backend
- Drupal frontend
- Multiple layers of caching for each app component, including edge CDN, Varnish, Memcached
- Support continuous integration and deployment

### EPA

*Infrastructure Consultant* | 2014 - Present

<https://www.epa.gov/>

Provide expert guidance on infrastructure development and ongoing improvements to support large-scale Drupal application

- MySQL database replication support, optimization, tuning
- Caching strategies with CDN to improve application performance
- Incident log and metric analysis to determine causes of and remedies to performance issues

## EDUCATION / CERTIFICATION

Intro to Python and Django / 2018  
*Training on development with Python and Django framework to further understanding for infrastructure support*

SaltStack Certified Engineer / 2014  
Cert # 0x0414F5F9

Red Hat Certified Engineer / 2008  
RHEL 5, Cert # 805008376234889

George Mason University / 2002 - 2003