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FRED SMITH

DEVOPS ENGINEER

DevOps engineer with 19 years of experience in technical team leadership, development, system design, implementation and hands-on support of complex, robust, scalable systems based on Linux and Open Source technologies.

SKILLS

Deep understanding of both foundational and user facing Internet technologies and protocols. Decades of experience working with Linux on bare metal and public cloud environments. Knowledgeable in building and scaling application frameworks such as Django, Rails, Hadoop, Grid Engine and AWS Lambda. Passionate about process automation, CI/CD and monitoring, using technologies such as Ansible, Terraform, Chef, Puppet, Docker, New Relic, Kibana, Grafana, Influx, Splunk and Cloudwatch.

EXPERIENCE

EdX, Cambridge, MA – *Senior Software Engineer, DevOps*

MARCH 2014 – PRESENT

Worked on a Development Operations team to support and encourage DevOps culture and methodologies for a rapidly growing educational software platform.

- Architected hosted education platform for businesses and universities that resulted in millions in sustainable bookings for EdX.
- Designed and implemented tools used by developers to deliver software to users quickly, including continuous deployment pipelines, infrastructure as code frameworks, and monitoring and alerting best practices.
- Effectively scaled a microservice platform to serve a global audience with millions of active users, by leveraging Amazon Web Services and Cloudflare CDN.

Get Satisfaction, San Francisco, CA – *Senior Devops Engineer*

OCTOBER 2013 – MARCH 2014

Managed systems orchestration and AWS hosted, dynamically scalable infrastructure supporting a platform for hundreds of hosted customer support communities with over 10 million daily visitors.

- Maintained 99.999% availability of a complex open source based platform through the use of multiple AWS Availability Zones and a real-time DR site.
- Worked on a software automation framework based on Chef and Ironfan to manage software components, instances and services in Amazon Web Services.
- Integrated internal monitoring with cloud services to quickly and reliably provide feedback to operations team about issues.
- Contributed various performance and security improvements to the company's Ruby on Rails v3 application.

Nuance, Burlington, MA – *Head of High Performance Computing Operations*

MARCH 2011 – OCTOBER 2013

Managed global operations team deploying and supporting over 15,000 compute cores, hundreds of applications, and petabytes of high performance storage.

- Led automation initiatives to improve deployment consistency across heterogeneous hardware and complex applications.
- Designed and implemented operational best practices in a growing environment.
- Modernized cluster monitoring, analysis and automated response with Graphite, Logstash and Ruby.
- Managed 10,000 sqft datacenter, Fiber channel SAN, 160Gbit core network
- Achieved minimal downtime and improved performance through use of monitoring, diverse redundancy and incident response.

Nokia, Burlington, MA – *Sr. Systems Engineer*

JANUARY 2010 – MARCH 2011

Created team of four to manage site operations, release management and customer integration. Utilized open source software to create infrastructure for a high availability database application.

- Developed a software automation framework based on Puppet and Cobbler to manage hundreds of systems world-wide.
- Designed and Implemented Cloudera Hadoop cluster for production model generation and Business Analytics.

Black Duck Software, Waltham, MA – *IT Manager & Sr. Systems Administrator*

APRIL 2005 – JANUARY 2010

Led staff in management of 24x7 IT environment. Scaled software as a service offering in a fast paced / VC funded company.

- Implemented foundational business technologies, including messaging, file sharing, knowledge sharing, time tracking, customer support tracking, sales pipeline management and remote access.
- Created disaster recovery policies that were realized in critical situations.
- Maintained high availability on mission critical applications.
- Automated administration tasks allowing minimal IT staff growth.

COREsense, Saratoga Springs, NY - *Systems Administrator*

APRIL 2004 - APRIL 2005

Maintained production e-commerce websites for over 150 businesses, requiring high availability, security and performance.

CMA Consulting, Latham, NY - *Mobile and Wireless Developer*

NOVEMBER 2003 - APRIL 2004

Researched and developed applications for handheld devices running PalmOS, PocketPC and Windows Tablet operating systems

Connected Kids, Troy, NY - *Linux Operations Manager*

SEPTEMBER 2002 - MAY 2003

Developed and directed the implementation of thin client computer labs based on Debian Linux and Knoppix.

Divided Sky Internet, Troy, NY - *Founder*

SEPTEMBER 1999 - NOVEMBER 2003

Founder of web application and hosting services company. Hands free hosting model that allowed clients to run websites and applications on leased servers.

EDUCATION

Rensselaer Polytechnic Institute, Troy, NY - *BS, Computer Science*

SEPTEMBER 1999 - MAY 2003