CHRIS ST. PIERRE

6715 Wildrye Rd.
Lincoln, NE 68521
(402) 304-0982
chris.a.st.pierre@gmail.com

EXPERIENCE

Senior Staff Software Engineer, *Petal Card, Inc.*   *April 2018 - Present*
- Lead multi-year project to refactor a legacy monolithic code base into microservices, including taking a lead in architectural planning, refactoring portions of the codebase as exemplars, and planning and producing CI/CD infrastructure to support refactoring efforts
- Lead long-running project to migrate all production code from a legacy Hashicorp Nomad environment to EKS, including reworking our AWS strategy, providing and procuring training, updating toolchains, and planning for scale
- Created, implemented, and steward the Engineering-wide Technical Review Process for making and recording sound technical decisions, ensuring production readiness, and learning from our successes
- Provide senior technical leadership on the Infrastructure team, across Engineering, and company-wide on a huge range of huge range of initiatives, including application configuration, code resiliency, incident response and postmortems, and documentation
- Coordinate and lead release engineering efforts, including managing CI, release, and deployment pipelines, tooling, and infrastructure
- Lead code quality efforts as our principal product has grown from two primary contributors to dozens
- Lead implementation and tracking of Engineering-wide DevOps KPIs
- Implement and support all infrastructure and CI/CD systems, including AWS strategy, networking, and other overhead; Kubernetes/EKS and Nomad; logging and observability; and all phases of developer environment setup and experience

Senior Software Engineer, CI/CD, *Cisco Systems, Inc.*   *June 2016 - April 2018*
- Technical lead on CI team providing services to teams maintaining dozens of components for multiple products
- Engineered self-service inventory-driven CI services using Jenkins pipelines and Docker for isolation
- Major contributor to ground-up greenfield overhaul of CI infrastructure, automating deployment of Gerrit, Jenkins, Zuul, and other supporting infrastructure with Ansible
- Core developer of Rally, an open-source benchmarking tool for OpenStack and other systems, 2015-2017

Senior Software Engineer, Plaform Engineering, *Cisco Systems, Inc.*   *June 2014 - June 2016*
- Participated in both internal and upstream development of OpenStack components, including Nova, Glance, Keystone, Cinder, and Horizon
- Led development of internal REST performance monitoring tool, giving cloud operators greater insight into hypervisor performance

Systems Engineer, *Amplify Education*   *March 2012 - May 2014*
- Served as subject matter expert for Bcfg2, coordinating configuration of thousands of servers in dozens of environments on multiple completely separate, often divergent platforms
- Led development on project to enable engineers to provision self-service environments in AWS or private clouds
- Prototyped Docker and related tools to develop a next-generation deployment workflow
- Developed Bcfg2 to meet enterprise and community requirements by adding features, fixing bugs, assisting with software releases, and performing general code maintenance
- Gave routine presentations on different aspects of Bcfg2 to various interest groups, ranging from the highly technical to broad executive overviews
- Wrote and maintained CloudFormation templates to automate provisioning new environments and platforms on Amazon Web Services

HPC Systems Administrator, *Oak Ridge National Laboratory*   *June 2010 - March 2012*
- Infrastructure Team Lead, July 2011-March 2012
- Led implementation of Bcfg2 for configuration management to replace Cfengine on a network of over 3000 physical and virtual services managed by over 20 administrators across five teams

- Overhauled software mirrors to tier deployment of updates, improve consistency and reporting, and deduplicate data
- Overhauled package build infrastructure to permit cross-platform builds and streamline package build, signing, and deployment process
- Wrote and implemented Sponge, a web interface to software mirrors using Pulp, Django, Celery, and AMQP to offload and distribute tasks
- Reorganized internal documentation wiki to increase automation and organization

EDUCATION

Nebraska Wesleyan University *1999 - 2004*
- B.A. in English, French, and Philosophy; minor in Computer Science

TALKS AND PRESENTATIONS

Writing and consuming REST services, LISA 2016 & 2017 (announced)

Writing (micro)services with Flask, LISA 2016

Docker and LXC, LOPSA East Tennessee August 2014

Internal Documentation for Systems Administrators, LOPSA East Tennessee May 2013; Professional IT Conference 2011; Cascadia IT Conference 2011; Southern California Linux Expo 7x (2009); Sysadmin Days Philadelphia 2007; Ohio Linux Fest 2007

System Administration Futures, Cascadia IT Conference 2011

Introduction to LDAP: Provisioning, Managing, and Integrating, Cascadia IT Conference 2011; Southern California Linux Expo 8x (2010); Ohio Linux Fest 2009

Saving the World with Fedora Directory Server, Southern California Linux Expo 7x (2009)

The Guru Is In: Spam, LISA 2008

Fighting Spam with Open Source Tools, Ohio Linux Fest 2009; Southern California Linux Expo 6x (2008); Sysadmin Days Philadelphia 2007; Ohio Linux Fest 2007

Hit the Ground Running: Spam, LISA 2007

PUBLICATIONS AND CONFERENCES

Tutorials Co-chair, LISA 2016

Facilitator, Running OpenStack Workshop, LISA 2015

Chair, USENIX Configuration Management Summit 2013 and 2014

Coordinator, The Guru Is In Sessions, LISA 2010-2013

Facilitator, Real-World Configuration Management Workshop, LISA 2013

Coordinator, "Advancing Women in Computing" panel, LISA 2012 and 2013; "Women in Tech" panel, LISA 2011

Hermanson, Matthew and Chris St. Pierre. "Staging Package Deployment via Repository Management." LISA 2011. http://www.usenix.org/events/lisa11/tech/full_papers/Pierre.pdf

Facilitator, Spam Workshop, LISA 2007 and 2008

OPEN SOURCE CONTRIBUTIONS

Thousands of lines of code to various OpenStack modules, 2014-2018: http://stackalytics.com/?user_id=stpierre&release=all&project_type=all&metric=loc

Core developer of OpenStack Rally, 2015-2018

Primary contributor to Bcfg2, a configuration management suite, 2011-2014

Created Docker images for the CentOS Cloud Instance SIG, 2014

Contributed various patches, including LDAP support and repository diffing, to Pulp, 2011-2014

UNRELATED ACTIVITIES

Speaker: *Nebraska Bike/Ped Crash Data Analysis*, Nebraska Bike/Walk Summit 2017

Maintain a comprehensive database of bicycle crash data for Lincoln, NE: http://stpierre.github.io/crashes/

Fluent in French