

Adam H. Lathers

email: alathers+jobs@gmail.com

phone: 858-337-1848

resume: <https://quihack.com/resume>

region: Austin TX Area

relocation: Open

travel: Open

Objective

Business savvy technical leader invested in continued growth as an authority on highly available distributed systems and services. Driven to learn, teach and lead teams of similarly self-driven contributors. Striving to advance my well-rounded skill set in order to contribute directly at the executive level.

Professional Experience

Sprig (formerly UserLeap, Mar 2021- Present)

Head of Security

- Ownership of Compliance including lead on successful SOC2 type II certification
- Ownership of Engineering Security
- Ownership of internal IT and device management
- Sales Partner for Vendor Security Assessment
- Build a greenfield Security Engineering team, to introduce secure by design principles
- Budget owner for roughly \$3mil annually across infrastructure, vendors, and security

Infrastructure and Security Technical Lead

- Rearchitect Infra-as-Code solution (Terraform/AWS), including workload optimization and resource isolation.
- Develop a ground up security and compliance program as first dedicated security resource

UC Riverside (Oct 2021-present)

Advisory Board Member - Design Thinking Program

- Active member providing guidance, feedback and program input to continuously develop and renew course and program curriculum
- Process includes full participation as both student and program advisor

ADP (Jan 2020 - March 2021)

Principal Site Reliability Engineer/Owner (Jan 2020 - Present)

- Comprehensive Observability Overhaul focused on migration to modern vendor services. Primary on annualized spend of \$8mil; Secondary on
- Reliability Program Owner for Compliance Solutions organization
- Define and drive best practices for modernizing incident response and event intelligence
- Primary Sponsor of program to overhaul enterprise wide observability
- Advisor to the office of the President
- Operational model creation for Adoption of DevOps and DevSecOps across enterprise

Space Exploration Technologies (SpaceX, Aug 2015 - Jan 2020)

Lead Site Reliability Engineer

- Security and Compliance owner and primary point of contact for Human Space Flight certification program including ISO 27001 and NIST 800-53 programs.
- Build and Manage team of Engineers focused on Toil Automation for Infrastructure OS and Application

management

- Team created bare metal provisioning automation (Python/YAML/iPXE) tied directly into inventory management, drift management (Puppet) and application provisioning systems (Ansible) creating an infrastructure as code foundation (Packer/Terraform)
- Primary Support team for multiple production services integral to flight readiness, CI/CD, simulations and data collection & analysis (Custom in house tools)
- Primary Support for vehicle interface infrastructure (Linux, hardware/firmware, puppet/ansible)
- Define and build Site Reliability Engineer team (SRE) for company wide services platform
- Budgetary Decision maker on \$4mil/annually
 - Grow VM hypervisor pool on shared storage by 225%
- Work breakdown: 40% management, 45% operational, 10% development, 5% other

IT Systems Engineer

- Primary Engineer for linux infrastructure
- Define and build Site Reliability Engineer team (SRE) for company wide services platform
- Author, creator and principal advocate of company-wide open source contribution and community participation policies
- Architect config management infrastructure from ground up to incorporate 5 active divergent solutions using iPXE, Puppet and Ansible
- Ownership transition of vehicle interface systems into IT for platform management
- Liaison with Flight Software as Primary point of contact and dedicated “customer” interface to IT
- Replace in-house and SaaS Cloud Solutions with internal dynamic VM pools

Citrix Systems Inc, SaaS Division (Sep. 2007 to Aug 2015)

DevOps Architect

- Spearhead onboarding new technologies and acquisitions
 - Architect, draft, and implement on premise Node.js automation pipeline
 - Architect new acquisitions in high availability configuration with cloud backed disaster recovery
 - Work with acquired teams to rapidly mature their availability and incident response culture
- Define, plan, and drive 3-12 month roadmap of operational goals for a team of senior engineers
 - Drive department wide goals, and align teams to meet quarterly and annual business objectives
 - Work to streamline development driven deployments while increasing uptime and system stability using automation and test driven verification
 - Build annual capacity and budget projections for platform operations
- Subject Matter Expert for proprietary and open source toolsets used to power \$600M SaaS organization
 - Define and drive technical screening process for new hires
 - Define and drive core training materials for onboarding and existing staff growth
 - Create environment for mentoring, oversight, and support for self-guided learning
 - Primary point of contact for “everything else” such as legacy systems and gaps in system ownership
- Driving force behind automation of core processes to support higher reliability and cost reduction
 - Automated tests for failure detection and remediation (cucumber, ruby, openssl)
 - Automation of multi-format certificate management (openssl, ruby, puppet, foreman)
 - Automated provisioning of cloud based services (bash, ruby, foreman, puppet, AWS)
 - Automated provisioning of highly customized on premise provisioning (bash, ruby, foreman, puppet)
- Primary contributor for “Path to Cloud” strategy for private, hybrid and public cloud needs
- Design and implement multiple short cycle time, high visibility PoC projects

University of California, San Diego

San Diego Supercomputer Center (SDSC ~ Aug. 2006 to Sep 2007)

Data Grid Engineer/Programmer Analyst III

- Lead Engineer: Tools assessment and data management for Library of Congress project
 - Design schema for extremely large data set management and replication
 - Create plan for data replication and integrity validation
- Lead engineer for support and maintenance of production Storage Resource Broker (SRB) infrastructure
 - Installation, configuration and maintenance of associated services including SRB, Postgres, and Globus
 - Development of a consistent, fluid and scalable migration plan to accommodate service upgrades across 35 different datagrids
- General systems administration and maintenance of production hosts and compute clusters including Solaris, AIX, and Linux

National Center for Microscopy and Imaging Research (NCMIR ~ Jun. 1998 to Jul. 2006)

Development Engineer/Programmer Analyst III

- Lead engineer for web/intranet backend leveraging Perl (Mason), PHP, and MySQL on Apache 2
- Administrator, DBA and systems engineer for Telescience team, <http://telescience.ucsd.edu/> (site no longer on-line)
- Migration of existing internal lab web software to current industry standard languages and environment
 - <http://ncmir.ucsd.edu/>
 - <https://ncmir-intranet.ucsd.edu/>
- Lead systems expert on development and deployment of packaged grid-enabled portal resource leveraging Jakarta Tomcat 5.x, Gridsphere 2, Postgres 7.4
- Systems administration and support for workstations and clusters used for bioinformatics and high end tomographic reconstructions
 - 32 node Rocks Linux cluster, member of Keck compute grid
 - 12 node Rocks Visualization cluster for 20-tile display, <http://ncmir.ucsd.edu/Press/09Biowall.htm>
 - 15 Mac OS X workstations
 - 10 Windows workstations
 - 5 Linux workstations. (RHEL/Suse)
- Maintenance of legacy systems, including SunOS 2.4 and earlier, OS 2 Warp, and Microware OS9
- Recruit, train, and manage staff and student employees

Specific Projects

Biomedical Informatics Research Network (BIRN ~ Apr. 2002 to Jul. 2006)

- Principal engineer responsible for construction and deployment of NIH funded experimental nation-wide distributed data grid
 - Manage approximately 60 remote hosts in 14 unique authentication realms
- Designed grid architecture and supporting infrastructure for development of a turnkey solution for grid creation and distribution
- Design and implement mechanisms to maintain a stable cooperative distributed data grid. Facilitated growth of project from grant proposal to 14 racks spanning 22 national test bed sites
 - Training for on-site staff to use and integrate with the grid infrastructure
 - Project grew from the initial \$30mil fund to a total of over \$100mil
- Ongoing administration and maintenance for the nation-wide BIRN research base. Webmaster, Postmaster, and Administrator for BIRN domain, <http://www.nbirn.net/> (site no longer on-line)

Technical Toolbox:

- BASH
- Ruby
- Ansible
- Python
- RHEL
- Ubuntu, Debian
- Mac OS X
- netstat
- netcat
- lsof
- tcpdump
- openssl (inc. s_client)
- Apache/Tomcat
- Puppet/Foreman
- MySQL
- Postgres

Education

University of California, San Diego

B.S. Computer Engineering

Worked full time to support tuition and cost of living

Completed 1st degree black belt concurrently with work and school

Completed summer course abroad at La Sorbonne, Paris: Introductory course, French Language

Certifications

RHCT 605009966226095, covering RHEL %

CISSP 670072, Valid 12/1/2018 (currently through 11/30/2024)

Publications

Lathers, A., Su, M., Kulungowski, A., Lin, A.W., Mehta, G., Peltier, S.T., Deelman, E., and Ellisman, M.H. (2006) Enabling Parallel Scientific Applications with Workflow Tools, Proceedings of the 6th International Workshop on Challenges of Large Applications in Distributed Environments, p. 55-60

<http://ieeexplore.ieee.org/xpl/articleDetails.jsp?tp=&arnumber=1652055>

http://digital-ducttape.com/wp-content/uploads/2015/05/alathers_clade.pdf

Additional Experience

- Martial Arts
 - 1st degree black belt Shaolin Kung Fu 2001
 - 1st dan (black belt) Dynamic Circle Hapkido, 2011
- Comic-Con International, Exhibits floor management and logistics
- Co-lead for development and design of GridAuth, <http://www.gridauth.com/>
 - Simple, extensible AAA style credential management system using Perl, openssl and MySQL, leveraging REST style development principles, and adopting current standards such as XML based webservice
 - Presently retired sourceforge project site, <http://sourceforge.net/projects/gridauth/>
- E-Commerce engine and site development (2004-2009)
- Freelance event production and management (2001-Present)
 - Prop design and production
 - Event design and layout
 - Pre-show and on-site logistics
- Tech Projects
 - Github: <https://github.com/alathers>