

ADAM H. LATHERS

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region: San Diego, CA 92104
relocation: available to relocate

OBJECTIVE

Motivated engineer invested in continued growth as an authority on highly available distributed systems and services. Looking to advance my well-rounded skill set in order to migrate my career upward from the assisted design, implementation and support to the next level of architecture and high-level/broad scope design and deployment.

PROFESSIONAL EXPERIENCE

Citrix Systems Inc, Citrix Online Division (CoL ~ Sep. 2007 to Present)

Applications Engineer

- ❑ Tech lead, Operations Application (OpsApp) team
 - ❑ Cross train OpsApp team to support all Citrix Online applications and services.
 - ❑ Directly mentor all new and junior staff to increase time to productivity for all team members.
 - ❑ Define and implement core interviewing and on-boarding for OpsApp team.
 - ❑ Lead/co-lead efforts for standardized documentation, training, and architectural workflows.
 - ❑ Comprehensive redesign of end to end deployment process; incorporating Development, QA and Operations needs into a single unified process for better accountability and provable correctness.
 - ❑ Responsible as technical advisory for all OpsApp team project needs including but not limited to capacity planning, datacenter commissioning, and service provisioning
 - ❑ Work within Operations department to improve current processes and architect future full-scale automation of application deployment and health verification.
 - ❑ Work with Engineering to embrace standardized runbook documentation for more comprehensive operations supportability.
 - ❑ Direct responsibility for monitoring, maintaining and advancing support for global SaaS provider.
- ❑ Special projects
 - ❑ Operations representative in product architecture and development scrums.
 - ❑ Work directly with Engineering during design of next generation service model for core infrastructure services.
 - ❑ Investigate potential third party solutions to increase business effectiveness including logging infrastructure and provisioning systems.
 - ❑ Work aggressively with 3rd party integrations teams for assimilation of acquired technologies into our custom infrastructure.
- ❑ Temporary mail administrator for production mail services
 - ❑ Administer and maintain Strongmail appliances for all customer facing product mail.
 - ❑ Ensure full support of CAN-SPAM act compliance.
 - ❑ Support and maintain application extensions for automated opt-out list maintenance.
 - ❑ Work with e-marketing teams to ensure that ensure that corporation wide adoption of user opt out policies are enforced and well supported.

University of California, San Diego

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

Data Grid Engineer/Programmer Analyst III

- ❑ Lead Engineer in charge of tools assessment and data management for Library of Congress project
 - ❑ Exhaustive tools testing and assessment; profiling available solutions for large scale reliable data movement
 - ❑ Complete replication and integration of foreign data environment using traditional filesystems and data abstraction methods.
 - ❑ Data integrity testing and validation; including development of baseline standards and failure recovery plans.
- ❑ Lead engineer for support and maintenance of production Storage Resource Broker (SRB) support.
 - ❑ 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 including Solaris, AIX, and Linux.
 - ❑ Management of multiple clustered environments for project groups running RHEL.
 - ❑ Management of multiple Solaris 9/10 hosts for production service delivery.

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/>
 - ❑ Management of Postgres environment for Gridsphere backend.
 - ❑ Architecture, Deployment, and Management of multiple heterogeneous Condor pools.
 - ❑ Principal systems administrator for forward progress of Telescience development.
- ❑ Migration of existing internal lab web software to current industry standard languages and environment.
 - ❑ Migration from WN to Apache2.
 - ❑ Migration from ember/lite to Perl 5.8 and PHP5.
 - ❑ Migration from mSQL to MySQL.
 - ❑ <http://ncmir.ucsd.edu/>
 - ❑ <https://ncmir-intranet.ucsd.edu/>
- ❑ Lead systems expert on development and deployment of packaged grid-enabled portal resource
 - ❑ Jakarta Tomcat 5.x
 - ❑ Gridsphere 2
 - ❑ Postgres 7.4
- ❑ Perform systems administration and support for multiple operating systems. 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)

Team lead for BIRN systems, network and support staff.

* Work concurrently with both BIRN and NCMIR (listed below) to develop nation wide distributed data grid project.

- ❑ Principal engineer responsible for the development and deployment of experimental nation-wide distributed data grid, which is pioneering new efforts in biomedical collaboration for projects sponsored by the National Institute of Health. Developed, deployed and administered infrastructure for nationally distributed racked computer hardware systems for use in the project.
 - ❑ Rocks (linux clustering toolkit) and shell scripting with other freeware tools and standards such as RPM, Perl, and XML.
 - ❑ Manage approximately 60 remote hosts, with upwards of 30 TB of spinning disk in vast heterogeneous environments.
- ❑ Designed grid architecture and supporting infrastructure. Leverage Rocks clustering technologies for development of a turnkey solution for grid creation and distribution.
 - ❑ Minimize time for expanding grid on the fly.
 - ❑ Generate architecture for simple grid-wide upgrade path.
 - ❑ Delivery of a Grid Security Infrastructure (GSI) savvy infrastructure for data intense job distribution.
- ❑ Design and implement mechanisms to maintain a stable cooperative distributed data grid. Facilitated growth of project from a vaporware grant proposal to 14 racks spanning 22 national test bed sites.
 - ❑ Baseline security specification to ensure grid security and single site security independence.
 - ❑ Distribution and maintenance plan for ongoing site patching and security audits.
 - ❑ Training and task generation for developing systems/network team to outline uptime requirements and goals.
 - ❑ Project has grown 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/>.
 - ❑ Administrator for all of the following resources: sendmail server supporting 56 active majordomo mailing lists and associated mhonarc archives. 2 development domains on multiple secured stand-alone Linux hosts using a large set of development tools and resources.

Linux file servers including Samba services for Linux hosts. Apache instance for nbirn.net with mSQL/MySQL backend, and DNS using BIND9 and tinyDNS.

- ❑ Evolved the original architecture drafts into a nationally recognized resource, which aids research at locations such as UCSD, Harvard, and Duke, as well as the NIH.

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

RHCT 605009966226095, covering RHEL 5/6

PUBLICATIONS

Lathers, A., Su, M., Kulungowski, A., Lin, A.W., Mehta, G., Peltier, S.T., Deelman, E., and Ellixman, 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/search/wrapper.jsp?arnumber=1652055>

http://digital-ducttape.com/Publications/alathers_CLADE06_submission-revision_20apr06-reformatted.doc

ADDITIONAL EXPERIENCE

- Comic-Con International, Con Services division
 - Critical services logistics
 - Special guest security management and oversight
 - Tactical Project Management
- Co-lead for development and architecture design for 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 webservices
 - Presently retired sourceforge project site, <http://sourceforge.net/projects/gridauth/>
- E-Commerce engine development with Sypher Studios, <http://www.sypher.net/>
 - Example deployment: <http://www.everypicture.com/>
- Freelance event production and management (2001-Present)
 - Labyrinth of Jareth Masquerade Ball, <http://www.labyrinthmasquerade.com/>
 - Prop design and production
 - Event design and layout
 - Pre-show and on-site logistics