

Summary

Linux generalist with well developed interpersonal skills and an ability to document and discuss technical concepts with a wide range of audiences. A solid team player with strong problem solving skills and an appetite for continual learning and growth. Over 15 years providing IT support and development for academic research and teaching at institutions such as the Massachusetts Institute of Technology, the University of Arizona, and the University of Minnesota. 10+ years running a web development consultancy and developing, managing, and writing for one of the more important Chinese Medicine sites in the western world used by many students and professional practitioners.

Education

B.S., University of Arizona, Tucson: Management Information Systems Governor's Recognition Award for campus networking project.

M.Ac., Massachusetts College of Pharmacy and Health Sciences, Boston: Acupuncture Voted "Best of the Best" acupuncturist multiple years with 7k+ patient base.

Currently

Linux Systems Engineer III - University of Minnesota (2020-Present):

Function as a linux generalist providing upper tier operations and web/application development support for 300+ linux machines (physical and virtual, redhat and ubuntu) in a HIPPA compliant environment. **Primary tools**: Chef, Ansible, Jenkins, Git, Bash, and Python.

Maintain, Document and Support a growing HPC gpu cluster, primarily for Al/ML workloads. Support a wide-range of NLP ETL processes. Build and support application specific containers to provide consistent tooling within a functionally air-gapped data enclave. Primary tools: Apptainer, Docker, Slurm, CUDA, Python, R and scientific applications such as 3dSlicer, XNAT, FreeSurfer, and RedCap.

Primary Contributions: increasing our use of containerization for legacy and newly produced applications, broad deployment of SSL cert automation, on-prem kubernetes deployments, and helping to grow our HPC offerings.



Technologies

Programming Languages / Integrations: Python and associated AI/ML and Web Development/Image Manipulation Libraries, Bash, PHP, Ruby, SQL, Javascript and HTML/CSS. 3rd party REST API integrations (JSON, +). Code Samples @ (gist.github.com/chaddupuis).

System / Server Orchestration: Chef, Ansible, Git/Github Actions, Terraform, Jenkins, Apptainer, Docker, and Kubernetes (k3s, tanzu). Vsphere/ESXi/Proxmox virtualization, nearly all versions of Mac, Windows, Linux/BSD in both client and server roles, small-scale GPU/HPC cluster configurations, and slurm configurations/usage. General cloud usage with Azure and AWS. Security and environment establishment with local and hardware firewalls, reverse and forward proxies and ssl cert automation.

Web / Server Systems: Django/Gunicorn, Django Rest Framework, Rails/Passenger, LAMP/LEMP stacks, React Native, Astro, docker/podman/apptainer containerization, GIT and CI/CD pipelines, PHP frameworks/CMS systems.

Management / Business: Experience managing direct hires, partners, vendors, remote consultants, city inspectors (construction, health, etc.) and the financial management tasks with running a small corporation.

Previously

Owner, Developer, and Practitioner - Yin Yang House Inc. (2006-2020):

All programming, writing, design and systems administration related to the Yin Yang House network of sites (~400k views/mo). Custom built EMR system (python) with accounting, theory and inventory API integrations. Social media and SEO management. Consulting and development for other health related businesses including large projects with in-house and off-shore developers.

Manage all aspects of employee hiring, training, and development including facilities management, architecting renovations, city planning, and code adherence. Primary practitioner providing over 2500 treatments/year, voted locally "Best of the Best" in acupuncture multiple years in a row.



Previously (cont.)

Consultant III - Massachusetts Institute of Technology (1996-1997 & 2001-2006):

Provided a range of highly visible technical projects from planning with stakeholders through to completion, documentation, and support. Examples include the development of a 3d visualization computing facility and a NSF funded teaching with learning technology program both utilizing customized applications, Windows domain management, and automated deployments.

Development and support of a small-scale ROCKS HPC cluster.

Involved with automation, development and physical management of over 300 Windows, Mac, Linux, and Solaris machines in public computing clusters and academic departments.

Direct faculty/researcher support and documentation roles for my projects, research/analysis tools, and upper tier support for the heavily Unix based MIT Athena environment.

Applications Systems Analyst – University of Arizona (2000-2001):

Served as Webmaster and Systems Administrator for the Wildcat Online, Kamp Student Radio, TV3, Advertising and Production Systems and other on-line/networked functions of Arizona Student Media.

Computing Coordinator - University of California Santa Cruz (1997 & 2000-2001):

Supported the use of various technologies by the Faculty, Staff and Graduate Students of the departments under my supervision. This involves everything from hardware selection and setup to software installation, configuration and training.

Network Administrator – University of San Francisco School of Law (1997-1998):

Managed over 150 windows PC and Macintosh computers. Assisted in the long-term development efforts with regards to educational technologies including research, installations, and support of web-based delivery tools and enterprise-wide access for legal titles.



Previously (cont.)

Network Administrator – University of Arizona, Tucson (1993-1995):

Provided consulting, development and upper tier support for departmental networks across campus. Novell network administration, general mac and windows applications support. Installs and support for all associated hardware.

Governor's recognition award for an extensive project bringing large segments of university departments onto the internet.

Technical Support Specialist - Michigan State University (1989-1992):

Technical support, training classes, and systems management for the outreach offices across the state of MI and work directly with the Vice Provost office.