Paul Gunther
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SUMMARY

- IT Professional with expertise in High Performance/High Throughput Computing systems architecture and maintenance in a HIPAA-level secure, diverse, academic research environment. Experience with software and hardware particular to HPC/HPT such as job management software such as Condor and Slurm, hardware such as GPU's, and supporting scientific workflows.
- Business Analysis and Process Improvement, Collaboration, Strategic Planning, and Continuance of Operations Planning
- Demonstrated advanced ability to integrate software, hardware, and cloud services in a scientific research environment.
- Experience assisting users to design workflows in data science, using tools such as HTCondor, Slurm, Python, LaTex, Mathematica, Matlab, SAS, R, SPSS, VM, Docker, Podman, and other container technologies.
- System administration experience on Windows, MacOS, Solaris, AIX, Ubuntu, FreeBSD, RedHat and Scientific Linux among others.
- Work experience with version control, configuration and endpoint management software (salt, BSE, git) as well as ticketing and documentation systems such as Jira and Confluence.
- Experience with data center maintenance coordinating with various vendors and technicians for external maintenance to ensure uptime.
- Knowledge of scientific and research workflows and grant funding requirements and timelines.
- Experience with storage systems, especially using ZFS, and RAID.
- Experience with networking, systems monitoring, including security, firewalls, and meeting HIPAA security requirements.
- Experience in using applications such as Globus, AWS, and unix command line utilities for management of large datasets for research, including managing data lifecycles, keeping secure HIPAA data, scientific workflows, secure data transfers and managing data archival processes.
- Experience supporting multiple authentication systems for users on multiple systems, such as NIS, Active Directory, LDAP, and Azure.
- Leadership and management of IT teams supporting rotation schedules, approving time, performance reviews, development plans, recruiting and managing staffing budgets.

EDUCATION

BA Geography, BS Environmental Science, San Jose State University, 1992

PROFESSIONAL EXPERIENCE

DevOps Engineer
UW Madison, School of Medicine and Public Health/Biostatistics
Madison, WI — October 2018-

Architect and maintain storage and compute system for Biostatistics HIPAA compliant HPC/HTC compute cluster.
Manage the relationship with third party vendors and other IT staff to maintain data center infrastructure.
Research and analyze current tools and applications and partner with faculty to select tools, methods, workflows, techniques and evaluation criteria to meet research needs.
Collaborate to find solutions to evaluate and analyze new technologies including performing complex cost/benefit analyses and make recommendations appropriate to the existing system and budget.
Design, implement, and maintain systems ensuring integration with existing infrastructure and technical integrations across internal and multiple external systems.
Anticipate issues with, come up with resolutions, and provide long term technical expertise to ensure the infrastructure's stability.

IT Manager
UW Madison, Russell Labs, College of Agriculture
Madison, WI — January 2009-October 2018

Directed, hired, and managed IT team of 3 FTE and several part time students.
Managed the network and systems administration to ensure compatibility with the University, College, Research and Sponsored Programs and DoIT at UW Central IT.
Consulted with faculty and their lab members to determine how to meet their needs for computational science and data management.
Coordinated with faculty, students and staff to meet departmental computing needs.
Led projects such as:

- Migrations of departmental email systems from Novell Groupwise to managed UW System
- Migration of Russell Labs to campus implementation of Office 365.
- Migration of Russell Labs static websites to Content Management System to enable content creation at the user level.
- Implemented an IT job tracking system and Knowledge Base.
- Migration of departmental servers from old server room to a colocation data center.
- Migration of data, as appropriate, to cloud services (Box, Google Drive, AWS, etc.)

- Implemented map survey with “Snapshot Wisconsin” project, a joint research project with Forest and Wildlife Ecology and the WI Department of Natural Resources.
- Coordinated faculty use of computing at UW HTC condor cluster to enable research with shared campus resources.

Sr. Information Processing Consultant
Department of Geography and Nelson Institute for Environmental Studies
Madison, WI — October 1997-January 2009

Direct and manage IT staff and oversee network and systems to ensure compatibility with the University, College, Research and Sponsored Programs and DoIT (UW Central IT).
System Administration of AIX, Linux, OS/X and Windows servers
Facilitated training of faculty, staff and students on software
Supervised student employee Help Desk team
Hired, managed and trained student Help Desk employees
Led projects such as:

- Coordinated with campus IT to transition Science Hall to from Cat5 10M to 100M network (21st Century Network project)
- Created “Brown Bag” Friday series of new web tools in mapping
- Developed modern website management system using Content Management Systems
- Implemented a job tracking system and Knowledge Base

System Administrator, Wingra Technologies
Madison, WI — June 1996-October 1997

Maintained internal network environment and systems for a startup software firm as well as provide support for customers for Wingra Technologies products.
Maintained test/QA environment for multiple email systems and services.
System Administration of Solaris and AIX production and development servers and Novell and Windows file servers and VAX/VMS clusters.
Managed Wingra Technologies BitNet! node.
Supported various clients worldwide on various platforms and systems for our email integration product (Missive) and networked printer software (Jnet) on VAX and Windows platforms.