Conor Kingston

Tucson, AZ | cmkingston21@gmail.com | 520-275-1232 | he/him

Summary

Systems Administrator and Software Programmer with 9+ years of experience supporting research-grade **Linux infrastructure**, high-volume scientific data services, and secure web applications. Skilled in Linux server administration, AD/LDAP integration, storage systems, and virtualization, with a strong foundation in **automation** using Bash, Python, Ansible, and Docker.

Known for clear documentation, collaborative problem-solving with scientists and engineers, and measured, security-first operations.

NASA Silver Achievement Award recipient | RHCSA (in progress, expected Nov 2025)

Skills

Operating Systems & Infrastructure

- **Red Hat Enterprise Linux** and **Ubuntu** (Linux system hardening, patch management)
- **Windows** (server administration), **macOS**
- **Active Directory** / LDAP, Group Policy, **IAM**
- Networked Storage & Filesystems (**NFS/SMB**, backups, integrity)
- Virtualization (**Hyper-V**) & Virtual Machine Management
- Cloud Fundamentals (**AWS** core services)
- Inventory & Asset Management

Programming & Automation

- Languages: **Bash, Python, JavaScript/TypeScript, HTML/CSS**
- Automation & Configuration Management (**Ansible**)
- Infrastructure as Code (IaC), backup/restore, monitoring (**Zabbix**)

DevOps & Web Services

- Containerization (**Docker**)
- Web App Deployment (reverse proxies, TLS/certificates)
- Networking: DNS, DHCP, NAT, firewall and switch management
- Version Control (**Git**)
- Incident/Change Management & Documentation
- Standard Operating Procedures (SOPs) & Knowledge Base

Experience

Planetary Data System - Small Bodies Node (SBN), Tucson, AZ

Systems Administrator & Software Programmer | Nov 2016 - Present

- Operate and secure Linux-based servers (**Red Hat Enterprise Linux, Ubuntu**) and services that host mission-critical planetary science archives, supporting reliable access for researchers and the public.
- Manage large-scale, network attached storage (**NAS**) systems for the archive; oversee day-to-day operations, performance, backups, and user access controls across 950+ TB of scientific data.
- Automate routine administration (user provisioning, configuration, deployments) with **Bash, Python,** and **Ansible** to reduce manual effort and improve consistency.
- Deploy, containerize, and maintain web applications and internal tools (**Docker**), including TLS certificate management and reverse proxy configuration for secure access.
- Integrate Linux services with directory services (**Active Directory**) to centralize authentication and simplify access management.
- Collaborate with project scientists to translate research requirements into operational services, including data submission, validation, and public dissemination workflows.
- Led key initiatives:
    - **Active Directory Domain Services** (AD DS): Architected and deployed an internal domain, integrating Linux systems with AD for centralized authentication and access control. Implemented AD-integrated **DNS** to streamline name resolution and improve service reliability.
    - **Active Directory Certificate Services** (AD CS): Planning and implementing internal Public Key Infrastructure (**PKI**) to support secure communications and certificate-based authentication across internal services.
    - **JupyterHub** Deployment:
        - Designing and deploying an on-premises JupyterHub environment to provide researchers with interactive, cloud-like data processing capabilities using PDS-hosted resources.
        - Architecting the system to spawn dedicated Docker containers running JupyterLab, each with a read-only mount to the planetary science archive, enabling secure, direct access to mission data.
        - Building with future scalability in mind, including a **migration path to AWS**, container orchestration, and centralized authentication via Active Directory.
    - Network Expansion: Spearheaded a major internal network upgrade, increasing network bandwidth by **10x** to support growing data archive throughput and improve performance for research workflows.
    - Policy and documentation improvements (**IT Security Policy**, operational runbooks, SOPs).
- Recognized with the **NASA 2022 Silver Group Achievement Award (PDS)** for contributions to archive services and community impact.

Apple Retail, Tucson, AZ

Genius (Technical Support & Repair) | Oct 2010 - Apr 2016

- Diagnosed and repaired macOS and iOS hardware/software and restored customer trust through clear, empathetic communication in a high-volume environment.
- Drove efficient triage, accurate documentation, and timely resolution while maintaining world-class service standards.

Certifications & Awards

- Red Hat Certified System Administrator (RHCSA) - In Progress (Expected Nov 2025)
- NASA 2022 Silver Group Achievement Award - Planetary Data System

Education

- Galvanize, Boulder, CO - Full Stack Web Development Immersive (24 weeks) | Apr 2016 - Oct 2016
- University of Arizona, Tucson, AZ - Undergraduate studies | Aug 2010 - Dec 2012