

Peter Upton

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Professional Summary

Experienced systems administrator and software developer with a strong DevOps background and a wide variety of experience.

Education

Bachelor of Science - Computer Science

Cumulative GPA: 3.3

Transferred from the University of South Dakota

Wichita State University

Fall 2019 - Spring 2023

Experience

Systems Integration Admin/Support

June 2023 – Current

Argonne Leadership Computing Facility, Lemont, IL

- Supported 4 GitLab instances and associated Continuous Integration (CI) tooling with more than 60 total users.
- Wrote Salt states to automate common tasks.
- Wrote internal and external documentation.
- Using Ansible, created "Admin Access" nodes to support administration and development tasks for the Aurora supercomputer.
- Assisted internal and external users in their use of GitLab and CI
- Assisted in hardware planning, installation, maintenance, and troubleshooting.

Adjunct Instructor

Jan 2023 – May 2023

Wichita State University, Wichita, KS

- Designed and taught CS497Q, "Intro to the Linux Operating System", to 40 students for the School of Computing.
- Tailored course to individual students when needed.
- Maintained lab infrastructure for students by creating bash scripts to provision virtual machines on a QEMU platform, allowing for rapid deployment of Linux systems for practical hands-on learning.

Member of Technical Staff – Software Engineer - DevOps

Jan 2022 – Apr 2023

NetApp, Wichita, KS

- Developed bare metal server provisioning automation, saving over 500 developer hours annually.
- Took ownership of the lab environment for a team of 10+ developers building solutions for Artificial Intelligence (AI) and High Performance Computing (HPC) including deploying new hardware, modernizing management of existing hardware, and resolving issues as needed.
- Responsible for maintaining a production BeeGFS filesystem containing AI training datasets, software builds, and other data supporting critical lab operations.
- Experienced managing large scale environments including enterprise storage systems such as over 1PB of NetApp E-Series and ONTAP storage with hundreds of SSD and NL-SAS drives, high performance BeeGFS file systems connected using RDMA capable InfiniBand and Ethernet networks, and 50+ RHEL and Ubuntu servers used for benchmarking and application development.
- Established Git-based storage for server platform (BIOS/UEFI/BMC) and InfiniBand/Ethernet switch configuration, enabling programmatic application via Ansible. This prevented configuration drift and ensured consistent application performance.
- Coordinated students assisting with maintaining lab equipment, including running meetings, managing the backlog, and coordinating project assignments.

- Tested and debugged NetApp E-Series and BeeGFS Ansible collections to enable automated deployment of storage systems.
- Resolved complex issues by troubleshooting both hardware and software.

Student Contractor

Sept 2020 – Jan 2022

NetApp, Wichita, KS

- Developed an Ansible module to enable automated provisioning of Virtual Machines for use in automated provisioning of Kubernetes clusters.
- Co-Authoring Netapp Technical Report [TR-4890](#) (MLOps with NetApp and BeeGFS).

Junior Software Developer

Jan 2019 - Dec 2022

READS Tech, Vermillion, SD

- Assisted in developing a bioinformatics file management system with a cloud component, with the goal of simplifying dry-lab workflows.
- Built a full stack solution using Python, Java, Node JS, Docker, JavaScript, React, Golang, Electron, and other tools.
- Developed cross-platform software for MacOS, Linux, and Windows.
- Regularly updated stakeholders on project progress and solicited feedback to ensure alignment and transparency.

Technician/Contractor

July 2018 - Aug 2018

South Dakota Internet, Yankton, SD

- Installed wireless internet service for customers in the rural Yankton, SD area.
- Deployed WiFi point to point systems.
- Configured an AWS hosted customer portal for the company's CRM and IPAM software.
- Setup home networking equipment for end users.

IT Intern

August 2017 - July 2018

Applied Engineering, Yankton, SD

- Assisted the plant manager during the transition between Systems Administrators.
- Used Windows Domain and Exchange administration tools.
- Diagnosed printers.
- Ran ethernet cable.
- Deployed new computer systems.
- Updated network documentation.

Certifications

- Red Hat Certified System Administrator (Apr 2023), ID: 230-070-047

Student Activities

- Led multiple hands-on Linux workshops at Wichita State University.
- Secretary of the Wichita State Linux Users Group.
- Participated in the North Central Collegiate Cyber Defense Competition (NCCDC).
- Led the Code Club at The University of South Dakota. We participated in yearly coding competitions and practiced coding challenges through the year using the Kattis platform.
- Participated in the [National Cyber League](#) cybersecurity competition, placing in the 98th Percentile Nationally.

Other Activities

- Licensed amateur radio operator, callsign KE0JJI.
- Miscellaneous personal electronics projects and repairs.
- Open Source contributor: <https://github.com/peterupton/>