

Peter Upton

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Professional Summary

Experienced software developer and instructor with a strong DevOps background.

Education

Bachelor of Science - Computer Science

Wichita State University

Cumulative GPA: 3.3

Fall 2019 - Spring 2023

Capstone Design Project - reimplementation of Jackit software for use in cybersecurity penetration testing.

Experience

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-Authored Netapp Technical Report [TR-4890](#) (MLOps with NetApp and BeeGFS).
- Setup and used Kubeflow, a tool used in deploying Machine Learning (ML) workflows based on Kubernetes, in order to enable internal data science initiatives and demonstrate how to incorporate NetApp storage solutions for customer data science workflows.
- Thoroughly documented internal tools and processes.

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.

Electronics Associate

May 2018 - July 2018
Walmart, Yankton, SD

- Assisted customers with locating items and technical questions in the electronics department.
- Helped stock and organize products.

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.

Summer IT Support

June 2017 - August 2017
Yankton School District, Yankton, SD

- Provisioned and took inventory of computer systems across multiple buildings.
- Worked with a team to efficiently document and expand the wired network.
- Setup multiple computer systems for student and teacher use.
- Installed and removed SMART Boards and other classroom technology tools.

Certifications

- Red Hat Certified System Administrator (Sept 2016), Certification ID: 160-193-868
- LPI Linux Essentials(Jan. 2015) LPI ID: LPI000332512 Verification Code: ye3ujddwn5

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.
- Indoor rockwall climbing
- Miscellaneous personal electronics projects and repairs.
- Open Source contributor: <https://github.com/peterupton/>