Wesley Jones

Cedar Falls, IA - wes@iamwpj.com

Education

Iowa State University

Ames - 2022 to 2024: *In progress* M.S. Cybersecurity

University of Northern Iowa

Cedar Falls - 2010 to 2015: B.A. History

Work History

University of Northern Iowa

Senior Systems Administrator - Cedar Falls - 2022 to Present

As a senior, I work educate coworkers and establish long-term goals with my team, alongside previous responsibilities.

Systems and Network Administrator - Cedar Falls - 2016 to 2022

I focus on automation to support a variety of servers and clusters. I interact with a broad range of techonologies and resources to help provide reliable IT at UNI.

Aces

IT Client Support - Cedar Falls - 2015 to 2016

Direct client support for desktops and server administration for a healthcare provider. Through this role I was exposed to a large swath of routine business and healthcare specific software. I developed the skills necessary to continue my career by working with networking and server technologies such as DHCP, DNS, firewalls, and vSphere management.

Conferences & Workshops

High-Performance Computing Solutions for Small Midwest Institutions

2024 - Cedar Falls, IA

The University of Northern Iowa is utilizing a planning grant from the National Science Foundation to decipher the ways in which campus can help to provide high performance compute resources to other similiar and smaller institutions in the Midwest. The focus of the workshop was to cover some outstanding concerns and establish communications with partner schools for future collaboration.

Throughput Computing

2023 - Madison, WI

A conference involving high performance computing enabled by the Open Science Grid project, a collection of institutional research centers across the country. This conference offered information about ongoing researching happening on the OSG network research clusters and technical details for furthering research.

Course Work

- Exploring Wireguard: a review of the software security in WireGuard and related readings.
- Ethics of data brokers: I analyzed the history and make up data brokers' consumer categorization. Put into context, the ethical process of assigning user groups to buckets and relying on these for reliable marketable groups is a process fraught with complicated assumptions.
- Using a CNN AI model to detect generated images: This is a naive implementation and method of image trust detection, but there are indicates that the technique is viable — with proper training and tuning AI networks can detect generated content without having to build new parameter sets for sepcific details in an image.
- Controlling Kafka data within a pipeline: I designed and implemented a service within a Kafka pipeline to encode and standardize data to ensure that neither consuming or producing clients would have to deal with these processes.

Specific Skills

- **Languages:** Bash, Python
- **Configuration Management:** Puppet
- **Systems:** Linux, vSphere, Docker
- **Workflow:** GitLab CI, Rundeck, Jira
- **Logging, Alerting, & Metrics:** rsyslog, ELK (and OpenSearch, etc), Icinga, PagerDuty, Prometheus, Grafana
- **High Performance Computing:** Slurm, OpenMPI

Special Projects

- **Centralized logging:** I took over a failing single node log search server (Graylog) and migrated to a multi-node Elasticsearch, Logstash, and Kibana cluster. I maintained an evaluation deployment of that service for several years as it gained support and traction for the value offered. Finally, I was able to deploy OpenSearch as centralized log cluster.
- **Network device monitoring automation:** Create a system to automate, import, and expand our service monitoring of network devices. The automation was needed to replace a cumbersome manual process that was not being completed effectively. I also expanded the service to enable network engineers to develop custom monitors and use a CI workflow to activate them.
- **High performance compute cluster:** I have operated the UNI HPC environment since 2018, consisting of a few different iterations. During the initial years, we worked on a plan with the academic parties on campus to migrate from an ad-hoc environment that I had built with spare hardware to a more sustainable permanent cluster. In 2022, we implemented a new cluster and I have continued to support it by providing software installation, parallelized computing skills, access and authentication, and advisement for continued growth of the cluster.