

EDUCATION

Rensselaer Polytechnic Institute

Bachelors of Computer Systems Engineering, Computer Science Minor

2023 - 2027

Relevant Coursework (to be completed by Summer 2025):

Embedded Control, Data Structures, Comp Architecture & Networks, Foundations of CS, Engineering Probability, Electric Circuits, Intro to Algorithms, Computer Communication Networks

EXPERIENCE

IBM

Site Reliability Engineer Intern

Tucson, AZ

Present

Machina Labs

IT Systems Administrator Intern

Los Angeles, CA

May - July, 2024

- Automated Windows device lifecycle process using Azure Active Directory, Intune, and Powershell scripts
- Deployed networking infrastructure at new site; set up VLAN, firewall policies, and VPN, with Fortigate firewall
- Provided technical support for Linux/Windows, successfully reducing backlog of over 100 tickets to a few
- Shadowed CI/CD process of an internal application on Azure

PROJECTS

CI/CD & Web K8s Cluster:

2023-present

K8s cluster utilized to self-host applications; hybrid (bare-metal + AWS)

- Consists of 2 API-servers w/ stacked ETCD, 2 permanent worker nodes and 3 on standby w/ Ansible deployment
- Implemented Calico CNI with Tailscale ingress, integrated ephemeral AWS EC2 instances w/ Terraform
- Deployed metrics monitoring & automated response with Prometheus Alertmanager, CI/CD pipeline w/ Jenkins

Personal Blog

2025-present

Website created to host demos for projects, document thought processes & logic

- Used Gin Golang backend w/ HMAC authentication, connecting to Postgres database & MINIO for object storage
- Utilized Astro framework with React to build frontend, modeled after modern UNIX system
- Automated testing and manual production deployment using Jenkins tooling
- Abstracted blog insertion to markdown & Jinja2 w/ Python, automated deploy on push with Jenkins webhook

Circuit to LTSpice Conversion Tool

2025

Program used to analyze & reconstruct hand-drawn circuits into LTSpice simulation

- Used a PyTorch Object Detection model for component processing using public-sourced dataset, custom trained Tensorflow OCR model for label/value processing
- Applied DFS, BFS, KDtree, and other algorithms to efficiently build Adjacency-List of components
- Accurate enough to save time over manually building circuits for verifying homework in electrical classes

WALKR

2024

AR assisted navigation mobile app with accessibility options

- Won #1 Best Hack of HackRPI 2024
- Built using Java & Android SDK, Implements ARCore, Geospatial, and Places API
- Handled AR-integration, GPS routing logic, overall assembly, and project management

SKILLS & HOBBIES

- **Coding, Scripting** - C, C++, Python, Golang, Bash/Shell Scripting, Javascript
- **Red Hat Certified Engineer: RHCE, RHCSA** - (220-166-979)
- **Server Administration** - Docker/Podman, Networking, SELinux, Ansible, Kubernetes, Terraform, Jenkins, Microsoft Entra ID, Intune, Powershell Scripting, AWS
- **Cloud Infrastructure/Frameworks** - Prometheus w/ Grafana, Astro, Helm, Git, React, PostgreSQL
- **Hobbies** - DIY Tech Projects, Weightlifting, Swimming, Biking, VFX, Cinematography