

# James Eisele

eisele.xyz

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## SUMMARY

Technical consultant with experience across data engineering, GIS workflows, infrastructure operations, automation, and regulatory reporting. Experience building Python tools, ETL pipelines, mapping systems, and reporting workflows that improve data quality, reduce manual processes, and support operational decision-making. Background includes broadband network expansion, compliance programs, infrastructure monitoring, and technical integrations during periods of rapid user and system growth.

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## TECHNICAL SKILLS

- **Development:** Python, SQL, Bash, JavaScript, HTML, CSS
- **Automation:** Terraform, Ansible, GitHub Actions, Apache Airflow, ETL pipelines, REST API integrations
- **Infrastructure:** Linux, virtualization, Prometheus, Grafana, Zabbix, Postgres
- **Cloud Platforms:** AWS, Azure, GCP, DigitalOcean, EC2, S3, IAM, Lambda, Cloudflare Workers
- **Networking:** Routing and switching fundamentals, TCP/IP, VLANs, DNS, DHCP, IPAM, firewall configuration
- **GIS & Spatial Data:** PostGIS, QGIS, MapLibre, spatial ETL, fiber and RF mapping, remote site telemetry, spectrum/interference monitoring.

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## EXPERIENCE

### Self-employed

2019 – Current

#### *Technical Consultant*

Technical consultant focused on data engineering, GIS workflows, infrastructure management, and regulatory reporting. Designs and deploys Python tools, ETL pipelines, and custom reporting systems that improve data quality, reduce manual work, and support operational and compliance decision making for clients.

- Design automated data synchronization workflows that improve operational visibility, reduce manual errors, and replace recurring manual reporting processes.
- Develop custom reporting & analytics solutions for operational costs, infrastructure utilization, compliance tracking, and client decision support.
- Build Python tools and Apache Airflow ETL pipelines supporting business intelligence, regulatory reporting, and multi-system data integration.
- Deliver GIS consulting across spatial analysis, ETL, data engineering, data quality improvement, and workflow design.
- Support telecom compliance reporting for FCC, USAC, and state broadband office programs related to subscriber and infrastructure data.
- Improve infrastructure management workflows through better asset data collection, reporting processes, and operational visibility.
- Assist in hiring and training for specialized GIS and technical project roles.

### Mountain West Technologies

2022 – 2024

#### *Operations & Network Engineer*

Served as lead coordinator for broadband funding and regulatory compliance programs while contributing to GIS, network operations, infrastructure planning, and acquisition integration initiatives. Supported scaling of fiber, fixed wireless, data center, and subscriber-facing systems during a period of approximately 5x subscriber growth.

- Helped secure approximately \$16M in federal and state broadband funding for network expansion and upgrades in underserved communities.
- Coordinated state and federal broadband compliance reporting and analysis, including BDC, USAC High Cost, ACAM, E-ACAM, CAF II, CPF-ARPA, BEAD, and FCC supply chain filing requirements.
- Built internal GIS and RF mapping workflows for fiber assets (VETRO FiberMap), wireless coverage (CloudRF), subscriber data, infrastructure planning, and customer analysis.
- Deployed and migrated network monitoring systems across data center, fiber, and wireless infrastructure (Zabbix).
- Developed software for federally mandated bandwidth and latency testing on distributed customer equipment.
- Integrated acquired company users, hardware, subscriber records, and operational data into existing billing and management systems under tight regulatory deadlines.
- Supported NOC escalations, outage coordination, infrastructure monitoring, data center operations, and wireless network optimization.

### Casper College

2019 – 2020

#### *Network Technician Intern*

Developed automation and internal tooling to improve visibility, administration, and data accuracy across campus network systems.

- Built Python and Ansible tools for Cisco network management over SSH using Paramiko.
- Integrated with EfficientIP REST APIs to audit DNS, DHCP, and IPAM records, identify stale address allocations, and improve IPAM accuracy.
- Created proof-of-concept REST API tooling for administering the college's Augusoft continuing education platform.
- Supported PacketFence-based BYOD wireless access control and device connectivity.

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## EDUCATION

### Casper College – Casper, WY

2018-2019 Associate of Science in Cyber Security, GPA: 4.0/4.0