Trever Ehrfurth

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SUMMARY OF QUALIFICATIONS

Hands-on technical leader with a career spanning data engineering, IT operations, and security architecture across global teams. Proven track record building and scaling enterprise data and cloud infrastructure, modernizing platforms, and maturing engineering practices across hybrid and multi-cloud environments. Combines deep engineering roots with senior leadership experience in governance, risk management, and cross-functional leadership, remaining equally comfortable writing code, designing architecture, or advising at the executive level.

WORK EXPERIENCE

Alliant Energy — **Madison, WI (Hybrid)**

Manager, Data Engineering — *Jul. 2026 – Present*

- Head of Data Engineering, owning architecture, strategy, and development across on-prem and cloud data warehouses.
- Oversee and lead a team of data engineers, architects, and administrators.
- Lead tool research, evaluation, and technology decisions for the data engineering function.
- Assess the platform stack to shape a modernization roadmap supporting multi-million-dollar data initiatives.
- Present strategy, performance, and recommendations to senior leadership and executive stakeholders.

Strategic Systems — **Dublin, OH (Remote/Hybrid)**

Director of IT — *Mar. 2025 – May 2026*

- Developed and executed enterprise-wide security governance and risk management strategy across U.S., India, and Brazil.
- Led enterprise modernization of core platforms (CRM, HRIS, M365/Entra, UEM), improving cross-functional alignment.
- Strengthened security posture via MFA enforcement, ITDR, encrypted email, and third-party application risk remediation.
- Led security incident investigations including forensic Entra ID log analysis, tracing account lockouts to legacy security apps.
- Implemented ITDR and Identified 18+ users exhibiting impossible travel patterns, account sharing, and geolocation anomalies.
- Centralized IAM with SSO/SCIM automation, reducing lifecycle errors and enabling zero trust access principles.
- Authored comprehensive Application Security SOP aligned to NIST 800-53, OWASP, and ISO 27001 for all internal app dev.
- Conducted compliance framework assessments mapping organizational readiness against SOC 2, ISO 2700, and FedRAMP.
- Identified and escalated compliance and regulatory risk, advising leadership on exposure and driving remediation efforts.
- Implemented dynamic security groups and functional shared mailboxes, improving access accountability and reducing drift.
- Established security governance standards for M365/SharePoint, remediating sprawl and enforcing access controls.
- Deployed Intune UEM, architecting compliance policies aligned to NIST CSF controls across all managed endpoints.
- Deployed secure cloud architecture (Azure IPsec tunnels, Tailscale) enabling compliant remote access for distributed teams.
- Oversaw third-party risk management including vendor security assessments and contract alignment reviews.
- Provided executive reporting on security posture, risk exposure, and remediation progress to leadership.
- Launched SSO-secured documentation platform to scale onboarding and promote culture of shared security responsibility.
- Led enterprise password management rollout to reduce credential risk and strengthen secure access practices.
- Oversaw and mentored system administrators, engineers, and developers, driving best practices and technical standards.

Manager of IT Systems — *Jan. 2025 – Mar. 2025*

- Built and mentored high-performing teams through hands-on workshops in AppSec, automation, and infrastructure hardening.
- Built and cultivated technology partnerships, integrating tools across internal operations and client solutions.
- Owned reliability and security of production and development environments, ensuring scalable and compliant operations.
- Managed enterprise VCS including repository governance, access controls, and permission strategy to reduce security risk.
- Established incident response processes and disaster recovery plans, improving audit preparedness and resilience.
- Advised leadership on application selection, budgeting, and implementations, to support business growth.

Data/Security Architect *Feb. 2023 – Jan. 2025*

- Architected and advised on data strategies, pipelines, and integrations across multiple clients and industries.
- Served as primary security administrator across internal and client-facing systems, applications, and tooling.
- Created and enforced security SOPs aligned to ISO 27001 and SOC 2, improving audit readiness and reducing risk.
- Integrated security platforms (Wazuh, Datadog, Grafana) to strengthen monitoring, alerting, and threat visibility.
- Built cloud data warehouse solutions and automated ingestion pipelines for real-time analytics.
- Developed API integrations to automate workflows and streamline vendor/client data exchange.
- Partnered with stakeholders to design scalable, compliant data systems aligned to business needs.
- Mentored developers (junior–senior) on modern data engineering practices, tools, and applications.
- Automated modular client onboarding using Terraform, Kestra, and Ansible, reducing setup time and cost.

Tools & Skills: Azure | AWS | GCP | Snowflake | Databricks | Python | Matillion | Terraform | Docker | Linux |Cloudflare | Bitwarden | Wazuh | Grafana | Datadog | Atlassian | Huntress | Kaseya

Verosint (now Imprivata) **Austin, TX (Remote)**

Data/Software Engineer *Mar. 2022 – Feb. 2023*

- Contributed to building a Golang-based ITDR platform integrating OSINT and AI-powered threat detection.
- Developed, tested, and maintained REST API endpoints, including unit test coverage and new feature implementation.
- Implemented Datadog observability and security monitoring, improving threat visibility and reducing MTTR.
- Designed and deployed ETL integrations supporting OSINT enrichment and behavioral analytics pipelines.
- Performed code reviews with focus on security, efficiency, and engineering standards expected in an ITDR platform.

Tools & Skills: Golang | GitLab | Datadog | Neo4j | CI/CD | Kubernetes | Linux | AWS

Navitus **Appleton, WI**

Data Engineer *Aug. 2019 – Mar. 2022*

- Built and automated Informatica ETL pipelines powering 90% of reporting and audit readiness.
- Implemented PHI/PII encryption aligned to HIPAA, CMS, and financial regulatory standards.
- Developed API-driven pipelines to load CMS exports into enterprise warehouse, improving audit efficiency.
- Supported operations by troubleshooting and optimizing SQL/ETL workflows, improving reliability and throughput.
- Balanced competing priorities across Government Programs and Operations teams to meet delivery commitments.

Tools & Skills: Informatica | Linux | Bash Scripting | Data Architecture | Data Normalization

Thrivent Financial **Appleton, WI**

Data Engineer *May 2016 – Aug. 2019*

- Designed and deployed Informatica ETL solutions and Bash automations, reducing manual effort for business teams.
- Authored SOPs for development environments and applications, improving consistency and onboarding speed.
- Participated in cross-functional disaster recovery exercises, coordinating data team response with enterprise stakeholders.
- Implemented organization-wide PHI/PII data masking initiative, securing developer access to sensitive production data.
- Mentored interns and contractors on ETL best practices, accelerating ramp-up and delivery quality.
- Troubleshoot and optimize SQL queries to improve reporting performance and reliability.

Tools & Skills: Informatica | Linux | Bash Scripting | Data Governance | SQL Optimization | Workflow Automation

EDUCATION

St. Norbert College **De Pere, WI**

Master of Business Administration *Sep. 2019 – May 2022*

- 3.9/4.0 GPA

University of Wisconsin – Green Bay **Green Bay, WI**

BS, Computer Science and German *Sep. 2013 – May 2017*

- Magna Cum Laude; 3.8/4.0 GPA

NOTABLE PROJECTS

Homelab

- Designed and operate a 42U homelab datacenter with a 5-node Proxmox HA cluster, TrueNAS storage server, and ~500TB of RAIDZ2 storage across 30 drives in a custom 45Drives chassis.
- Architected a 10G storage backbone with jumbo frames, isolated VLANs, and Tailscale zero trust networking, keeping public exposure minimal and maintenance traffic separated.
- Implemented tiered NVMe storage pools separating VM compute, app data, and ephemeral workloads, reducing backup size and enabling fast, clean restores.
- Implemented layered intrusion prevention across all public-facing services using CrowdSec, enforcing centralized ban decisions from distributed behavioral detection agents; augmented by Wazuh and SigNoz for SIEM and observability.
- Automated infrastructure provisioning and configuration with Ansible and Terraform, with graceful UPS-triggered shutdown sequencing to protect against power loss.
- Featured by industry-leading YouTube creators for homelab architecture and design, reaching tens of thousands of viewers in the self-hosted and infrastructure community.