

WILLIAM GOODE

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EDUCATION

Ph.D. in Mathematics

University of North Texas | 2023

Dissertation: Annihilators of irreducible representations of the Lie superalgebra of contact vector fields

4.0 GPA | Published in *Expositiones Mathematicae*

B.S. in Mathematics, B.S. in Economics

University of North Texas | 2017

3.79 GPA, Cum Laude

TECHNICAL SKILLS

Languages: Python, SQL (BigQuery, MS SQL Server, PostgreSQL), C# / .NET

Cloud & Infrastructure: AWS (Lambda, S3, RDS, Athena), GCP (BigQuery, Cloud Storage, Cloud Run, IAM), Docker, Data ingestion pipelines

Backend: FastAPI, ASP.NET Core, Entity Framework, LLM integration

Data Engineering: Data pipeline development, Vector databases, Query optimization and performance tuning, Exploratory data analysis, Schema reconciliation

EXPERIENCE

Backend Engineer

Scaylor AI | August 2025 – Present

- Built and deployed an LLM-powered query generation service with automated validation, multi-stage promotion pipelines, and production observability serving millions of rows.
- Designed multi-tenant cloud infrastructure on GCP with Terraform-managed IAM, encryption, scheduled ingestion, and CI/CD pipelines with automated quality gates.
- Shipped a full-stack internal tool from zero — FastAPI backend with LLM integration, React frontend with interactive graph visualization, deployed to production in under a week.
- Reduced technical debt by retiring legacy services, consolidating cloud projects, and removing thousands of lines of dead code while maintaining zero-downtime deployments.

Software Engineer

Concan Consulting Corporation | April – June 2025

Senior Lecturer of Mathematics

Vanderbilt University | August 2023 – August 2024

PUBLICATION

C. H. Conley, W. Goode. "An approach to annihilators in the context of vector field Lie algebras." *Expositiones Mathematicae* (2024). arXiv:2403.01728