Tyler Will Data Engineer | Cloud Infrastructure

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512-767-4456

Austin, Texas

Portfolio

in Tyler Will

Profile

Data Engineer with 3+ years of experience building scalable ETL pipelines, cloud infrastructure, and backend systems using SQL, Python, and Azure. Delivered high-performance data transformations for simulation telemetry and quality assurance workflows, optimized data ingestion, and automated infrastructure using YAML, REST APIs, and custom logging pipelines. Passionate about data accuracy, system reliability, and cross-functional collaboration.

Skills

Languages & Tools: Python, SQL, C#, JavaScript, TypeScript, YAML, Bash, Powershell

Data Engineering: ETL/ELT Pipelines, Data Modeling, LiteDB, REST APIs, CI/CD, Data Validation

Cloud & Infrastructure: Azure (Storage, DevOps, Functions), GitHub Actions, Grafana

Expanding Expertise In: PySpark, Hive, Trino, Data Lakehouse concepts, matplotlib

Achievements

Backend Service Optimizations

 Improved simulation performance by 86% by refactoring backend data processing and optimizing telemetry ingestion

Grafana-Based Notification System

 Built a real-time notification pipeline using Grafana, Azure Storage, and C# custom logging for live monitoring

UI Overhaul with React Grid System

 Reduced frontend latency by over 60%, dropping load time from ~7.2s to under 3s with a React Grid overhaul

Education

Bachelor of Science - Computer Science, Colorado State University 02/2019 - 07/2021

Professional Experience

Independent Data Engineer, *Contract Projects*

01/2025 - present | Austin, Texas

- Built internal tools to automate simulation result extraction and transform data into structured formats using SQL and YAML pipelines
- Designed custom logging pipeline in C# and integrated with Azure cloud containers for centralized debugging and pipeline monitoring
- Created test datasets and validation tools for telemetry ingestion systems to support QA and simulation accuracy

Full-Stack Software Developer, *General Motors - Motorsports* 09/2022 – 12/2024 | Austin, Texas

- Rebuilt backend node allocation system into a factory design pattern, improving request routing and simulation throughput by 127%
- Created custom YAML-based build and deploy pipelines to manage Azure-hosted services, integrating telemetry ingestion workflows
- Worked closely with race engineers to validate and transform simulation results, storing them in SQL and LiteDB for downstream analysis
- Developed a logging and notification framework using C#, Azure, and Grafana to track bugs, ingest failures, and system health metrics

Software Engineer - Quality Assurance,

General Motors - Manufacturing 06/2021 - 09/2022 | Austin, Texas

- Automated data validation workflows across 80+ facilities using Python scripts and Excel macros, ensuring compliance with telemetry data rulesets
- Reported data defects, documented results, and worked to ensure validated business logic and data flow accuracy
- Led test automation for critical manufacturing applications across 80+ facilities globally, improving test coverage

Projects

Healthcare Data Pipeline

Built a small-scale ETL pipeline using Python and pandas to ingest and clean structured CSV datasets. Loaded results into a SQLite database. Designed for practicing data normalization, transformation logic, and storage automation in preparation for larger-scale workflows