Daniel Branysh

Dallas, Texas, 75208 • (432) 770-5384 • danielbranysh@gmail.com • LinkedIn • GitHub

Technical Skills

Languages: Java, Python, Rust, SQL, KQL, R, Shell Scripting
Frameworks & Libraries: Spring Boot, React, Kafka, RabbitMQ, Prometheus, Grafana
Cloud & DevOps: Azure, Kubernetes, Docker, K9s, KubeCTL, Azure DevOps, GitHub Actions
Architecture: Microservices, Event-Driven Design, RESTful APIs, Observability, CI/CD, **Practices:** Agile, Test-Driven Development (TDD), Secure Coding Standards

Work Experience

Software Engineer (L3) – American Airlines, Fort Worth, TX • *Nov 2023 – Present*

- Designed and implemented **AAQUILA**, a high-throughput asynchronous queue processing platform with React frontend, Kafka/RabbitMQ backend, and custom alerting, enabling over **100K transactions/day** across 7 microservices.
- Tuned Azure Kubernetes Service (AKS) resource profiles using telemetry data from ADX, **reducing pod memory usage by 45%** and improving horizontal scalability.
- Developed and automated legacy system reconciliation using Bash scripts and audit-driven validation pipelines, **reducing manual security operations by 22%**.
- **Championed Agile best practices** and launched a mentorship initiative that improved junior developer ramp-up time by **40%** and boosted sprint throughput by **25%**.

Software Engineer (L2) – American Airlines, Fort Worth, TX • *Jun 2021 – Nov 2023*

- Led the migration of the company's legacy ticketing system into a scalable microservices-based ecosystem using Spring Boot and RESTful APIs, **improving system uptime and latency by 80%**.
- Designed and deployed a RabbitMQ-based event queue to offload critical workflows from legacy systems, **cutting load by 50,000 transactions/day**.
- Integrated Prometheus custom metrics for Kubernetes HPAs, **resulting in 15% downtime reduction** under high traffic.
- Reduced Mean Time to Detect and Recover (MTTD/MTTR) by **over 45%** using Grafana dashboards and custom ADX queries for live alerting.

Education

- **Master of Science, Data Science** – University of Texas Austin • ***Expected Dec 2026***
  Focus: Bayesian Inference, LLMs, Computer Vision, Simulation-Based Inference
- **Bachelor of Science, Computer Science** – UT Permian Basin • ***May 2021*** • **GPA: 3.97**
  Honors: President's List x3, IEEE CS Founder
  Research: **Lightweight Intrusion Detection in Ad-hoc Vehicle Networks**.

Projects & Awards

- **AAQUILA (2024):** Enterprise-grade message orchestrator with NLP input, supporting microservice-based re-platforming of legacy flows.
- **Lightweight IoT IDS:** Designed anomaly-based intrusion detection model for IoT edge devices, enabling **real-time threat detection** with <5% resource overhead.
- **Hackathon Finalist (2024):** Led a team of 5 engineers to 4th place (out of 27) at American Airlines Hackathon, prototyping a logging overhead service using internal APIs.

Certifications

- Regression & Predictive Modeling (UT Austin)
- Deep Learning Specialization (UT Austin)
- Simulation-Based Statistical Inference (UT Austin)