

JOSHUA DARDASHTI

jsdardashti@gmail.com | linkedin.com/in/joshua-dardashti | github.com/jdardash | jdardash.github.io

EXPERIENCE

Full-Stack Engineer

Jan 2025 – Present

Taloc Technologies

Hybrid

- Built the internal C#/ASP.NET Core platform that standardized KPI tracking across 5+ federal contract pursuits. The MVC web apps and REST APIs replaced reporting that had been split across separate business units.
- Automated the data pipelines behind interactive pitch decks; real-time synchronization replaced manual data pulls, so internal decisions were made from current numbers.
- Stood up CI/CD with Jenkins and Terraform: infrastructure provisioned from code, automated test gates, zero-downtime releases.

Junior Software Engineer (Part-Time)

Sep 2023 – Jan 2025

4S Silversword Software & Services

Hybrid

- Designed SQL data marts and Power BI models that became the executive reporting layer. Report preparation time fell 30%, and recurring ad-hoc requests turned into self-service.
- Wrote modular ETL frameworks with incremental loading and automated testing. Break/fix tickets fell by half once data quality validation caught issues before they reached production.
- Profiled slow queries and reworked stored procedures and indexes based on execution-plan analysis; report generation time dropped by half.

PROJECTS

Space-Domain Awareness Collision Predictor | *Python, SGP4, Plotly, FastAPI* | github.com/jdardash/space-collision-predictor2025 – Present

- Implemented SGP4 orbital propagation in a modular computation engine that forecasts satellite trajectories and closest-approach distances over configurable time windows.
- Added a multi-stage conjunction detection pipeline (miss distance, relative velocity, orbital geometry) that assigns automated risk classifications against configurable thresholds.
- Deployed the system as a FastAPI microservice with interactive 3D Plotly orbit visualization, exposing REST endpoints for satellite lookup, real-time TLE ingestion, and JSON conjunction reports.

Market Data Lake & Analytics Platform (Alpha Research Platform) | *Python, DuckDB, Polars, Apache Arrow, Parquet, NATS*

JetStream, SQL

Jun 2023 – Present

- Built the ingestion layer feeding the platform's Parquet data lake, pulling from Databento, FRED, and crypto derivatives sources partitioned by dataset, schema, and symbol. Every fetch writes a manifest recording row counts, cost, and provenance.
- Serve analytics over a 7.6 GB archive of tick trades, top-of-book quotes, and 1-second bars by running DuckDB SQL directly against partitioned Parquet, with Polars and Arrow handling columnar transforms in place of row-wise processing.
- Built the event-streaming backbone on NATS JetStream: durable subjects, at-least-once delivery, publish idempotency keyed on event ID, and queue-group consumers. Versioned envelopes thread correlation, causation, and OpenTelemetry trace context end to end.
- Wrote the idempotent ETL loading execution fills from a SQLite ledger into a DuckDB analytics store, with covering tests and absent benchmark fields logged as explicit data gaps rather than silent nulls.

SKILLS

Programming Languages: Python, C#, JavaScript, SQL

Backend & Web: ASP.NET Core, FastAPI, REST APIs, MVC, ReactJS

DevOps: Jenkins, Terraform, CI/CD, Docker, AWS, Git

Data & Streaming: DuckDB, Polars, Apache Arrow, Parquet, Data Lake, OLAP, NATS JetStream, Pub/Sub, OpenTelemetry

Databases: PostgreSQL, SQL Server, ETL, Power BI

EDUCATION

University of California, Santa Cruz, CA

Jun 2022 – Jun 2026

B.S. Technology & Information Management

GPA: 3.9