# Nathan Luckock

Pheonix, AZ | 6239809255 | nathanluckock@gmail.com | LinkedIn

#### WORK EXPERIENCE

#### API Architecture Design | Transpara

Remote

Software Architect & System Designer | Miro

Jun 2025 - Present

- **Designed and implemented scalable API architectures** for polling and subscription based systems, standardizing interfaces to support high-volume throughput with a sustained 95%+ completion rate under load
- **Developed intelligent data flow** controls including automated registration and deregistration of metadata, robust MQTT publishing with timestamp validation, and resilient error handling with fallback logic for API failures
- Authored detailed documentation and flow diagrams covering integration logic, data paths, and error recovery, ensuring maintainability and enabling rapid onboarding for new developers and cross-functional teams

# Inmation Data Interface API | Transpara

Remote

Software Architect & Backend Developer | Python

Jul 2025 - Jul 2025

- Architected and developed a high-performance real-time streaming system for Inmation, handling 500,000+ data
  points per hour with sub-500ms latency; implemented WebSocket subscriptions and MQTT integration to support
  50+ connections and 250,000+ messages/hour with 99% uptime and no data loss
- Optimized API performance with a Valkey caching layer and configurable TTL, reducing API calls by 60% and cutting response times from 2–5 seconds to ~300ms through strategic data flow improvements

### **ODBC** Interface API | Transpara

Remote

Software Architect & Backend Developer | Python

Jun 2025 - Jun 2025

- **Designed and built a high-performance ODBC interface** supporting SQL Server, Oracle, PostgreSQL, and more, with built-in time series analysis, efficiently handling 15,000+ daily requests at a 99.9% success rate
- Improved query performance using Valkey caching with a 90% hit rate, cutting response times from 1-5 seconds to ~300ms, reducing database load by 70%, and ensuring faster, more reliable data delivery under high request volume
- **Developed scalable data retrieval endpoints** for current, historical, and trend data using custom query templates and efficient pagination, supported by a dual polling system that auto-discovers new metadata and continuously refreshes cached values to ensure accuracy, low latency, and high throughput across large datasets

# LEADERSHIP EXPERIENCE

#### Project Owner, API Infrastructure | Transpara

Remote

Engineering Lead | Python, Docker, Linux

Feb 2025 - Present

- **Took full ownership** of critical API platforms, overseeing architecture, end-to-end development, code quality, performance optimization, and technical delivery across multiple real-time and historical data systems
- Led cross-functional collaboration between backend, QA, infrastructure, and product teams to ensure long-term scalability, system reliability, technical alignment, and customer-focused outcomes
- **Drove technical direction** by establishing coding and architectural standards, mentoring junior software developers, and fostering maintainability, engineering consistency, and sustainable team growth

### Demo Data Rebuild Lead | Transpara

Remote

KPI & Node Architecture Coordinator

Nov 2024 - Dec 2025

- Led full reconstruction of internal demo environments after emergency data loss, rebuilding KPI definitions, node hierarchies, lookup interfaces, and metadata across legacy systems; validated 12+ complex demo pipelines to ensure functional accuracy and alignment with product standards
- Coordinated globally under pressure, including 2 AM syncs with Portugal-based developers, to deliver fully functional demo sites used across development and engineering teams within tight deadlines

# **EDUCATION**

## **Brighamn Young University Idaho**

Rexburg, Idaho

Bachelor of Applied Science in Computer Science | 4.0 GPA

Graduation Date: Jul 2026