

## Michael Welles

Email: mlwelles@gmail.com | Phone: 347-450-6518 | Location: Brooklyn, NY

# Michael L. Welles

\*\*Address:\*\* 38 Covert St, Brooklyn NY 11207

\*\*Phone:\*\* 917-586-9218

\*\*Email:\*\* mlwelles@gmail.com

---

Dear Hiring Manager,

I'm reaching out about the Principal Software Engineer role because the challenge you've described—leading technical vision across a data ecosystem while staying hands-on—is exactly the kind of work that energizes me. I've spent the last several years in roles where I needed to be both the person mapping out the architecture and the person who could debug production issues at 2am, and that's where I do my best work.

At Raytheon, I led the technical direction for real-time flight telemetry systems processing data from thousands of jet engine sensors. The interesting part wasn't just building the streaming pipeline on Databricks—it was figuring out how to evaluate multiple ML models in parallel without adding latency, then creating an audit system that could trace every alert back to a specific model version or code commit. When you're dealing with decisions that might ground a commercial aircraft, that traceability matters. I had to deeply understand both the business domain (engine maintenance cycles, inspection protocols) and the technology constraints (streaming latency, model freshness, concurrent evaluation patterns). That experience of connecting technical decisions to real business outcomes sounds similar to what you're looking for here.

The part about being a "hands-on role model" resonates with me. At MediData, I inherited mobile engineering teams that were struggling with velocity. Rather than just mandating process changes, I paired with engineers to show what good looked like—cleaner CI/CD, better test coverage, tighter feedback loops. We increased team velocity by 2.5x, but more importantly, we changed how people thought about their work. At Huge, I built an engineering guild system where senior engineers could propose R&D initiatives. One of those experiments turned into a \$5M contract because we'd created a culture where people felt empowered to innovate.

I noticed you're looking for someone who can "represent the data team in technical forums across engineering" and "apply a data lens at the ecosystem level." At Raytheon, I led the effort to inner-source common solutions—SDKs for parsing proprietary formats, quickstart kits for new projects, synthetic data generators. I worked with 40+ teams migrating to our Databricks platform, which meant I spent a lot of time translating between data engineering concerns and the needs of application teams, infrastructure teams, and business stakeholders. That cross-functional translation work is something I've done throughout my career, whether it was at Dayforward building an underwriting platform that had to

satisfy insurance regulators, or at Istari Digital ensuring our compliance automation met DoD ATO requirements.

You mentioned expertise in distributed systems, cloud architecture, and modern data platforms. At Riverdrop, I designed an ML-driven ETL pipeline with asynchronous data flow using AWS SQS/SNS, implementing idempotency and retry logic for reliable event-driven processing. At Dayforward, we built the entire insurance platform on Kubernetes with Go microservices and a federated GraphQL API—launched in under ten months from first commit to regulatory approval. At Istari, I led the team building a cryptographic asset registry in Python and Rust that had to handle complex lineage queries efficiently while meeting zero-trust security requirements. These weren't just architectural exercises—they were systems that had to run reliably under real load with real consequences.

What excites me about Credit Assistance is the emphasis on fostering strong engineering culture and continuous learning. I've always believed that the best technical decisions come from teams that feel empowered to experiment, question assumptions, and learn together. Your "show and tell" approach and focus on professional development align with how I've tried to build teams throughout my career.

I'd love to talk more about how I could contribute to your data engineering vision. The combination of hands-on technical leadership, cross-functional collaboration, and building systems that drive business outcomes is exactly what I've been doing—and what I want to keep doing.

Looking forward to hearing from you.

Michael Welles