

Christopher A. Rotunno

AI/Data Engineer

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Nashville, TN USA

Visionary AI engineer who orchestrates production-grade LLM pipelines serving 12K+ global users while catalyzing \$100K+ monthly revenue. Masters translating cutting-edge research into bulletproof enterprise deployments that never fail during market crises. Cultivates elite engineering teams across continents while architecting systems that transform chaotic financial data into crystalline intelligence. Transcends conventional AI boundaries—Fortune 500 companies trust my infrastructure with their most sensitive operations.

SKILLS

Technical

- Architects scalable data pipelines for high-volume ingestion and modeling.
- Optimizes ETL systems for financial, capital markets, or operational data.
- Builds secure, resilient SaaS platforms (Python, JS, C#, ASP.NET, Node, Docker, SQL).
- Delivers data products that align with business and executive strategy.
- Leads complex deployments across cloud and containerized environments.
- Translates raw data into compelling BI dashboards and visual analytics.
- Implements ML/AI models and designs LLM workflows for enterprise use cases.

People

- Delivers exceptional client experience by implementing active listening skills and observing cues to identify needs and provide tailored solutions.
- Uses strategic questioning techniques to uncover customer and team member needs and build rapport.
- Remains calm and collected during high-stress situations.
- Adapts communication style to match diverse customer preferences and cultural backgrounds.
- Successfully recruits and onboards team members through relationship-building and compelling value propositions in resource-constrained environments.
- Achieves sales targets by conducting thorough needs assessments to match customers with appropriate solutions.

WORK EXPERIENCE

Root Labs - Founder, AI Engineer

Feb 2023 - current

Nashville, TN

- Engineered a Python database ingestion pipeline application with optimized append functions to reduce financial data subscription costs by 79% (from \$118 to \$25 monthly) through selective data retrieval and containerized PostgreSQL storage.
- Orchestrated a virtual multi-environment Docker infrastructure using Compose for dev/prod deployments and Swarm for orchestration, creating a unified development environment that ensures consistent workflows across cross-functional teams.
- Developed a chart-to-text pipeline leveraging the Gemini LLM API to automatically convert stock market visualizations into descriptive narratives, enhancing trader comprehension of technical patterns.

- Architected SQLAlchemy ORM framework to systematically transform nested API responses into optimized relational tables, ensuring consistent data types and relationships across all ingestion processes.
- Implemented hybrid cloud architecture using Windows Server 2022 as a central hub integrated with Azure services, enabling flexible resource scaling and distributed computing while maintaining control over critical on-premise operations
- Successfully recruited and *retained* a 4-person team of skilled professionals through strategic networking and relationship-building (zero recruiting budget), driving collaborative innovation that delivered key project milestones on schedule.

AE Global Solutions Inc. (DBA Socrates Platform) - Data Analyst

February 2018 - November 2021

- Managed daily operations of e-commerce platform by monitoring automated systems and ensuring seamless website updates, maintaining business continuity and system reliability as de facto operations manager.
- Maintained round-the-clock availability as primary systems administrator, safeguarding data center operations against critical failures and environmental threats while minimizing downtime for revenue-generating online platforms.
- Collaborated with legendary economist Martin Armstrong, developer of foundational AI-driven economic modeling since the 1970s, gaining rare insights into advanced predictive analytics while supporting the Socrates platform.
- Ran critical data importer and data updater workflows processing 200GB+ of daily financial data through ASP.NET environment, coordinating C# and VB.NET components to ensure seamless integration and maintain database integrity
- Coordinated technical partnerships with major financial data vendors (S&P Global, Reuters, and CSI Data) and MongoDB Atlas administration, ensuring seamless integration between external feeds and internal database systems.
- Led a geographically distributed team of 4 backend developers across multiple time zones, implementing agile workflows and communication protocols that accelerated project delivery while ensuring code quality and knowledge sharing.

Intrinio Inc. - Data Quality Analyst

May 2017 - November 2017

- Led NLP initiative under CFO guidance to automate XBRL tag classification into financial statement line-items, implementing tidy text principles, TF-IDF vectorization, and n-gram analysis to improve data accuracy by 15%.
- Performed detailed data validation and manual corrections using internal dashboard interface, enhancing financial data accuracy by 10% through systematic quality control of 10-K, 10-Q, and 8-K filings.
- Collaborated directly with C-suite executives (CEO, CFO, CMO) in an agile team environment, consistently contributing prepared insights and strategic questions during weekly team meetings to drive data quality initiatives

Wells Fargo - Data Analytics Intern

June 2016 - August 2016

- Collaborated cross-functionally within Consumer Financial Services with underwriting, fraud, fulfillment, call center, and analytics teams to successfully process 400,000+ monthly credit card applications, ensuring seamless workflow coordination across departments.

- Streamlined underwriting processes using Microsoft SQL Server and machine learning models (logistic regression, decision trees) via the Provenir platform, achieving a 30% reduction in review time and hundreds of thousands in annual labor cost savings.
- Engaged in an intensive corporate leadership development program alongside senior executives, demonstrating cross-functional problem-solving by facilitating trade agreements between teams during strategic simulation exercises.

EDUCATION

University of Colorado Boulder - Master of Sciences,
Business Analytics (Software and Data Engineering Focus)

Middle Tennessee State University - Master of Business Administration,
Music Business