

Hiring Manager Contact

Christina Tkach

Head of Investigations

 [linkedin.com/in/christinatkach](https://www.linkedin.com/in/christinatkach)

 christina.tkach@inca.digital

Company Info

Inca Digital (<https://inca.digital>) is a Digital Asset Data and Intelligence Company started in 2018.

Inca serves clients across national security, intelligence, leading crypto exchanges, large financial institutions, regulators, and law enforcement. Public examples of some of our work:

- [Wyoming Stable Token Commission Partners with Inca Digital Federal LLC to Enhance Security and Transparency for State-Issued Stable Token](#)
- [CFTC Selects Inca Digital Federal as Winner of Agency's First Science Prize Competition](#)
- [U.S. Crypto Traders Evade Offshore Exchange Bans - WSJ](#)

Inca operates as a fast paced, nimble, global, and remote technology company. We leverage an asynchronous-first workflow, try to minimize time spent on meetings, and rely heavily on detailed documentation, atomic iterations, and open-debate. We don't track hours, or care where you work from, as long as timelines are being met and work is being delivered!

Work with and learn from some of the smartest people from all over the world with diverse industry backgrounds (such as intelligence, traditional finance, data engineering, IT security, math, biology/chemistry, and investigative journalism)

Job Description

Join the Market Intelligence Division of our Investigation Team to analyze cryptocurrency market data, identify trading anomalies, and produce actionable insights for clients in the digital asset and financial sectors.

Core Responsibilities

- **Market Data Analysis:** Collect and process market data from centralized and decentralized exchanges. Identify liquidity patterns, price discrepancies, and anomalies in trading activity.
- **Anomaly & Manipulation Detection:** Develop and apply methodologies to monitor and detect suspicious market behavior, including wash trading, spoofing, front-running, and artificially inflated volumes. Use quantitative and qualitative evidence to explain findings.
- **Blockchain & Protocol Research:** Evaluate blockchain and DeFi protocol mechanisms – including tokenomics, liquidity provision, and cross-chain interactions – and assess their impact on exchange market activity.
- **Data Engineering & Automation:** Design and maintain scalable data pipelines by integrating diverse data sources, including REST, WebSocket, GraphQL, and blockchain RPC APIs; implement automation to enable continuous market monitoring and reporting.
- **Visualization & Reporting:** Translate analytical findings into structured, data-driven reports and dashboards that reveal key patterns, correlations, and risks. Present results clearly and accessibly for both technical and non-technical audiences.
- **Collaborative Investigations:** Collaborate with the Investigation team on cases involving price manipulation, insider trading, and illicit financial flows, combining blockchain and market data analysis.

Credentials/Skills

Required Skills & Experience

- Proficiency in Python for data analysis (pandas, NumPy), API integration, and workflow automation.
- Advanced proficiency in SQL for data querying, transformation, and performance optimization.
- Proven experience working with exchange market data – order books, trades, funding rates, open interest, and volume metrics.

- Knowledge of crypto market microstructure, including centralized and decentralized exchanges, liquidity provision models, and derivatives trading mechanisms.
- Experience applying anomaly detection methods to time-series data, with an understanding of market-specific irregularities such as wash trading, liquidity mirroring, or artificial volumes.
- Hands-on experience with on-chain data and tooling (block explorers, smart contracts, RPC endpoints, and indexing platforms).
- Experience with data visualization tools and libraries (e.g., matplotlib, Plotly, or BI platforms).
- Analytical writing and documentation skills – ability to produce clear, evidence-backed insights.
- Experience using Git for version control and collaborative workflows.

Additional Information

This is a remote position. Candidates must be fluent in English.

How to Apply

To apply, please complete one of our Market Data Challenges of your choice in [this repository](#).