Zachary A. Kraehling

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Professional Summary

Data and analytics professional building analytical models, production data pipelines, and decision-support systems with Python and SQL. Experienced with dbt, Dagster, AWS, financial systems, data quality, statistical analysis, and production software development.

Skills

Analytics: SQL, Python, statistical analysis, data modeling, data visualization

Analytics Engineering: dbt, Dagster, data pipelines, data validation, data quality, automated testing, API integration

Data Platforms: PostgreSQL, Redshift, Apache Spark, AWS

Programming / Tools: C++, Bash, Git, GNU/Linux, React, Palantir Foundry, MongoDB

Experience

Fortitude Reinsurance
Investment Analytics Associate | August 2023 – Present

- Built a Dagster-orchestrated production pipeline supplying FX rates and index fixings to an internal API and triggering fixed-income analytics.
- Built a dbt-based valuation engine for interest-rate swaps.
- Developed Python/SQL analytical pipelines on AWS to generate interest-rate scenarios and datasets used by actuarial and investment teams in quarterly and annual reserving.
- Built Streamlit data-quality dashboards to validate option-adjusted spreads in externally projected asset cash flow pipelines.
- Developed tested, documented Python modules supporting dynamic cash flow projection datasets.
- Implemented private-credit data selection logic for impairment testing.

Clearwater Analytics
Client Servicing Analyst | December 2021 – August 2023

- Validated investment datasets against cash flow predictions and custody data; reconciled portfolio transactions and positions across third-party providers for financial reporting.
- Documented quarterly investment accounting reporting procedures and integrated alternative investments, including limited partnerships, into client reporting workflows.

Open Source Contributions

full-fred | Author & Maintainer | Python · PyPI

- Published a Python library integrating the Federal Reserve Economic Data (FRED) API, with 230,000+ PyPI downloads; maintained a tested, modular codebase, documentation, and automated CI/CD publishing.

QuantLib | Contributor | C++

- Expanded C++ test coverage and implemented default settlement-day logic for overnight-indexed swaps.

CVXPY | Contributor | Python

- Simplified validation logic, clarified error messages, and modernized NumPy API usage.

Education

Boston University | MS, Applied Data Analytics | 2025

The Ohio State University | BA, Economics | 2019
Cum Laude · Cofounder and President, Sports Analytics Society