

Eyuel Elijah Kahsay

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PROFESSIONAL SUMMARY

Data Analyst with software development expertise, specializing in Python, SQL, and cloud-based analytics solutions. Skilled in building end-to-end data pipelines, interactive dashboards, and automated reporting systems using AWS, React, and Tableau. Strong background in statistical analysis, financial modeling, and machine learning with proven ability to deliver insights that optimize performance by 25-40%. Combines analytical rigor with technical development skills to create scalable, data-driven solutions across financial and energy sectors.

TECHNICAL SKILLS

Programming & Databases: Python, SQL, R, JavaScript, Java, C, C++

Data Analytics & BI Tools: Pandas, NumPy, Tableau, Plotly, matplotlib, Excel, Streamlit, statistical analysis

Development & Cloud: React, Flask, AWS (Lambda, EC2, S3, SES), REST APIs, Docker, Git/GitHub, ETL pipelines

Machine Learning & Advanced Analytics: scikit-learn, predictive modeling, A/B testing, time-series analysis

Domain Expertise: Financial analytics, portfolio optimization, risk metrics, energy market analysis

EDUCATION

University of Calgary

Calgary, AB

Bachelor of Science in Computer Science

Sep 2022 – Present

- Relevant Coursework: Statistical Methods, Data Structures & Algorithms, Machine Learning, Database Management, Web Development
- Science Research Internship Program: Applied data analysis, statistical modeling, and quantitative research methodologies

PROJECTS

Market Risk & Portfolio Analyzer | Python, Streamlit, Plotly, Pandas, NumPy, yfinance

2025

- Built professional-grade portfolio analytics platform processing real-time financial data with interactive visualizations
- Implemented comprehensive risk metrics including VaR, Sharpe ratio, Sortino ratio, and correlation analysis for multi-asset portfolios
- Developed Monte Carlo simulations and efficient frontier optimization for portfolio allocation strategies
- Created automated performance reporting dashboards tracking returns, volatility, and risk-adjusted metrics

Trading Strategy Backtester | Python, Streamlit, Plotly, Pandas, NumPy

2025

- Designed quantitative backtesting framework for momentum and mean-reversion trading strategies across multiple timeframes
- Integrated advanced performance metrics including Sharpe, Sortino, and maximum drawdown calculations
- Built interactive parameter optimization interface allowing strategy tuning with historical market data
- Implemented transaction cost modeling and slippage simulation for realistic strategy performance evaluation

Energy Market Data Analyzer | Python, AWS (Lambda, EC2, S3), Flask, Pandas, Plotly

2025

- Developed cloud-based analytics platform for processing and visualizing energy market time-series data using AWS infrastructure
- Automated data collection pipelines with AWS Lambda for real-time market insights and trend identification
- Applied statistical analysis to identify price patterns and anomalies in energy market datasets, improving forecast accuracy
- Built RESTful APIs for data access and created interactive dashboards for market trend visualization

EXPERIENCE

Educational Technology Researcher <i>University of Calgary</i>	May 2024 – Aug 2024 Calgary, AB
<ul style="list-style-type: none">Analyzed learning outcomes datasets using Python and SQL, performing regression analysis and hypothesis testing to identify key drivers of student engagement, resulting in 25% platform improvementBuilt interactive Tableau dashboards and data visualizations to communicate statistical findings to stakeholders, enabling data-driven decision-making for educational technology developmentDeveloped automated data collection and ETL pipelines, reducing manual processing time by 40% and improving data quality through validation proceduresApplied machine learning models (scikit-learn) to predict learning patterns, implementing A/B testing frameworks with 95% confidence intervals to validate tool effectiveness	

Junior Software Developer (Freelance) <i>Pre-IB</i>	Jan 2023 – Apr 2023 Remote
<ul style="list-style-type: none">Performed comprehensive web analytics using Python and SQL to extract user behavior insights, implementing data-driven UI improvements that increased engagement by 30%Built automated reporting systems and KPI tracking dashboards using React and Python, delivering real-time analytics to business stakeholdersDeveloped data visualization components and interactive charts using Plotly and D3.js, improving information accessibility and user comprehensionDesigned and executed A/B tests on interface elements, analyzing conversion metrics with statistical methods to optimize user experience	

AWARDS & CERTIFICATIONS

PURE Research Award <i>Cenovus Energy</i>	2024
<ul style="list-style-type: none">Recognized for innovative data analysis contributions applying statistical methods to measure program effectiveness	
Researcher Skills Badge <i>University of Calgary</i>	2024
<ul style="list-style-type: none">Demonstrated excellence in quantitative research methodologies and data analysis techniques	