Kyle Protho, MS

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Professional Summary

As an applied intelligence professional with over a decade of experience, I specialize in bridging the gap between intricate data and high-stakes executive action. I am adept at transforming complex dynamics into strategic foresight, moving organizations from "What happened?" to "So what and what's next?". My core promise is turning ambiguity into advantage by providing the clarity required to move forward when the path is unclear.

Core Expertise

- **Strategic Foresight:** Identifying future risks and market opportunities by analyzing intent and patterns.
- **Applied Intelligence:** Integrating ethical frameworks and rigorous sense-making into strategic planning.
- **Technical Edge:** Expertise in the Analytics Stack (SQL, Python, Power BI, R) and predictive modeling, including Monte Carlo simulations.
- **Risk & Compliance Leadership:** Deep background in Anti-Money Laundering (AML), fraud investigations, and healthcare quality improvement (CMS Stars).

Professional Experience

UPMC Health Plan | Pittsburgh, PA *Senior Quality Improvement Analyst* | December 2022 – Present

- **Predictive Optimization:** Architected a risk management tool for CMS and NCQA Stars, using predictive modeling to optimize performance targets.
- **Intelligent Automation:** Reduced manual reporting processing time by 96% (from 20 hours to 45 minutes) through custom automation solutions.
- **Executive Communication:** Leveraged SQL and Python to translate complex performance metrics into actionable insights for leadership.
- **Data Strategy:** Drove quality initiatives through in-depth data visualization and analysis using Power BI and Excel.

BNY Mellon | Pittsburgh, PA *Vice President, Specialist – AML Compliance & Controls* | August 2021 – December 2022

- **Regulatory Compliance:** Strengthened AML controls by utilizing SQL and Python to evaluate and enhance regulatory processes.
- **Risk Mitigation:** Identified control deficiencies and partnered with business units to implement effective, audit-ready compliance solutions.

UPMC Health Plan | Pittsburgh, PA *Strategy Analyst* | February 2019 – August 2021

- **Population Health:** Analyzed member claims data using SQL, R, and Python to shape population health strategies and actionable insights.
- **Competitive Intelligence:** Researched market best practices and partnership opportunities to strengthen organizational positioning.

PNC | Pittsburgh, PA *Sanctions Analyst* | August 2018 – February 2019

- **Financial Investigations:** Conducted in-depth research on flagged entities and suspicious payments to detect fraud or sanctions evasion.

ICO Alert | Pittsburgh, PA *Research Analyst* | November 2017 – July 2018

- **Market Intelligence:** Established a competitive intelligence program and launched the *ICO Alert Crypto Minute* to provide daily market updates.

Nicopure Labs | Tampa, FL *Market Intelligence Analyst* | November 2017 – July 2018

- **Market Intelligence:** Established a competitive intelligence program to monitor competitors and reduce uncertainty on market conditions in countries of interest.

Western Union | Denver, CO *AML Risk Assessment Analyst* | June 2015 – March 2017

- **Forecasting Risk:** Analyzed geopolitical and crime patterns to forecast money laundering and terrorism financing risks.
- **Visual Analytics:** Created an interactive Excel infographic to streamline risk assessment processes and user insights.

Key Projects

Analysis ToolBox (analysistoolbox) | [GitHub Repository](#)

- **Description:** An open-source Python library (500+ commits) designed for data collection, statistics, and intelligence analysis.
- **Impact:** Developed 100+ functions for sense-making, including anomaly detection, Monte Carlo simulations, geospatial clustering, and LLM integration (OpenAI/Anthropic).
- **Philosophy:** Every function includes a "Teaching Note" to explain the qualitative insight and "why" behind the code.

Education & Certifications

- **Master of Science (MS), Applied Intelligence** | Mercyhurst University, 2013 - 2015
- **Professional Certificate, Medical Statistics** | Stanford University School of Medicine, 2021
- **Bachelor of Arts (BA), Political Science & Criminal Justice** | Edinboro University, 2008 - 2013

- **Certifications:** AI in Healthcare, Machine Learning Specialization, Introduction to Python Programming, Claude Code in Action.

Publications

- *Moving Money for Better: The Role of Data Analytics in Western Union's Anti-Human Trafficking Initiative*.
- *Assessing organizational structure and identifying potential new members of criminal organizations using Twitter networks*.