

Doster Esh, CFA

AI Systems & Knowledge Management Consultant | NLP & LLM Specialist

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I love making sense of chaotic data and helping people learn quickly so they can make well-informed, well thought out decisions. I've done large scale training, optimization and NLP categorization - currently working on tree/graph/ontologies and low-latency hierarchical clustering.

Currently developing a tool for integrated web extension data capture with local/Gdrive files and email for holistic visualization, query and project management (Cursor/python/SQL). Dynamically assign and change clustering with low latency to match current needs, back=propagate user preferences from clusters to trees to graph to embeddings. All about reducing clutter, understanding what is new and picking up where you left off. Integrates data drift and categorization research, vector database (pgvector), RAG, graph/tree, front end (html/D3). Similar to Obsidian, Heptabase, Notion, Sublime offerings. Not launched.

Qualification Checklist

Education	Practical
- Econ BA from Haverford College - CFA (Chartered Financial Analyst) - Galvanize Data Science Intensive - Continuing ed - AI topics, Quantum Computing, Calc, Linear Algebra, RAG	>10yrs DS/quantitative analysis >5yrs business visualization - some Tableau, no Looker, lots of Python/VBA + react/flask/gradio - Extensive experience with large datasets on GCP using SQL/Python/Spark - Multiple collaborations between technical and product/biz ops. Hands on with code back to front.

Project Examples

Accomplished	Measured	Action
Refactored image/text embedding training	200k sample quarterly retraining on GCP pushed to production service	Traced prior work. Consolidated data sources, automated GCP/AWS CRON, integrated with both DS experimental database and production data flows. Clearly documented
Developed pairwise embedding classification algo	Estimated 2-3% type misclassification in 1mm+ human-annotated image dataset	Isolated key dimensions via divergence, then pairwise reduction tournament. Documented in towardsdatascience article. Deeper paper available.
Dynamic hedging factor model	hedge fund risk targets from 25% to 12-13% with retention of 70% targeted exposure	Ridge regression with variable autocorrelation windowing. Integrated SQL/python/excel pipeline. Blind backtesting.

Automation of climate exposure scoring	1 week build process down to 2 hours. Validated alpha generation and risk reduction for client acquisition	Took csv/python/csv process to integrated Factset/PostgreSQL/python/pdf process with integrated backtesting
Developed electricity trading platform	Top performer in MISO/SPP over 10yr period. 30%+ returns.	Integrated weather, market, planning, energy price and outage data in proprietary database with day specific predictive analytics for up to the second data visibility.
Developed and managed team of successful traders and analysts	Launched 10+ energy/ trading/ analytics careers. Superior returns. Many are running successful firms now.	Evaluated fit, problem solving, technical skills. Provided theoretical foundation, hands on data access (SQL for everyone), tooling (prop website/integrated excel), risk oversight, new market opportunities.

Employment Timeline

2010-2020	2020	2021	2022	2023-Present
EE	ENT	KA	NRD	KA

(KA) Knowledge Algorithms - private DS/AI consultant (trading/energy focus)

(NRD) Nordstrom - data scientist - multi-modal outfit generation

(ENT)Entelligent - data scientist - investment/climate

(EE) Endurance Energy - 10-15 person electricity trading desk - founder/trader/data architect

JPTC Energy - electricity trading desk - trader/data architect

Susquehanna Intl Group- global market making/trading - Energy Trading/Utility analyst

Chartwell Investment Partners - 15bb institutional investment firm - analyst/portfolio manager

Closing Comment

I use AI daily for spec driven coding but am deeply hands-on in python/SQL for core architecture/algorithms. I do research and generate documentation and plans with LLMs, but write key notes/intros/articles by hand. I have done the most work in NLP categorization and knowledge graph integration. Communication with a variety of stakeholders has been key in my career: data scientists, engineers, product specialist, finance/investment, C-suite decision makers, investors, students.