Abraham Robison

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PROFESSIONAL SUMMARY

AI/data leader with deep finance roots who turns ambiguous business problems into practical, production AI systems - agentic workflows, RAG, forecasting, and decision tooling with measurable impact (~1,500 and ~1,000 FTE hours/year saved, ~$50M/year saved, ~35 bps/year outperformance on a $100B+ AUM portfolio). 10+ years across Google Treasury, Russell Investments, and BlackRock; now an Applied AI Scientist at FEV Analytics shipping judge-gated agentic build pipelines and full-stack AI tooling, alongside a public portfolio of production-grade applied-AI systems.

CORE COMPETENCIES

Applied AI & Agentic Systems | Corporate Finance Transformation | Forecasting & Treasury Analytics | LLM Evaluation & Governance | RAG & Document Intelligence | Portfolio Construction & Asset Allocation | Model Risk Governance | Full-Stack AI Engineering

WORK EXPERIENCE

FEV Analytics

Apr 2026 - Present

Applied AI Scientist (Contract)

Remote

- Building AI and data tooling on a private-asset valuation platform, most of it delivered end-to-end through an autonomous, judge-gated Claude Code build pipeline (plan to build to review to ship); open-source versions of the pipeline's tools are public at github.com/aberson/claude-skills.
- Built the Roll-Forward Monitor end-to-end - a model-output viewer, report generator, and calculation store - wiring model output through S3 to parquet to SQLite to a React front end with waterfall/bar-chart visualizations and a natural-language query interface over the data.
- Ported a personal autonomous code-generation factory (Planner to Coder to Critic loop) into the platform for an Excel to production-tooling workflow; built a graphical entity-resolution mapping interface.

Google (Treasury)

2022 - 2025

Senior Quantitative Analyst

- Designed an end-to-end agentic workflow for a bank-fee use case - ~1,500 FTE hours/year saved; designed and shipped an AI documentation-generation system (GCP/Python) converting training videos into workflow documentation - ~1,000 FTE hours/year saved.
- Designed and implemented bulk FX-contract reading and analysis - ~$50M/year saved; co-created an AutoML cash-forecasting pipeline for 2,000+ accounts, raising interest income on a $20B+ operating cash portfolio.
- Built an internal RAG document-retrieval assistant grounded in real process documents so contractors could self-serve answers - with hard-negative mining to fix retrieval errors and a governance loop re-benchmarking answer quality on any model or prompt change.
- Ran LLM model evaluation for quant treasury - curated scored evaluation sets in a Python scoring loop to compare models on treasury tasks; built macroeconomic forecasting models with gradient-boosted trees (XGBoost, CatBoost); co-created an AI/ML/Automation working group that enabled 2-5 projects/year to receive funding and engineering development.

Russell Investments

2011 - 2022

Senior Quantitative Research Analyst

- Built macroeconomic ML forecasting models - ~35 bps/year outperformance on a $100B+ AUM portfolio; created global asset allocations for 3 years on the Strategic Asset Allocation Team (~$250B AUM); built a Black-Litterman-style forecasting framework that helped guide short-term asset allocation across the firm.
- Co-founded the Investment Model Risk Board - evaluated and documented 100+ investment models and established a review process for new models, improving modeling standards and reducing risk.

- Client-facing for ~7 years on the investment strategy team, communicating the firm's market and economic views and asset-allocation strategy directly to clients; managed a three-person team building model infrastructure and SQL databases.
- Built and maintained extended Kalman filter models for a tactical long/short equity and fixed-income product; co-led an intern mentoring program (100 interns/year) and ran a recurring finance book club for interns over 3 years.

BlackRock

2010 - 2011

Risk & Quantitative Analysis Consultant

- Designed a risk-reports database with the Fund of Hedge Funds Risk team and backfilled existing data; built a Python forecasting model used by the fixed-income team.

SELECTED PROJECTS

toybox - Local-First Home AI

Open Source | In Daily Use

Fully-offline home AI for young children: passive listening (VAD + Whisper STT) to NLP intent detection to a 1,300+ branching activity engine to parent-approval UI to child PWA with generated sprites and TTS. Production applied-AI at scale across speech, vision, and LLM orchestration; in real daily family use. Public: github.com/aberson/toybox.

Python/FastAPI, React/TypeScript, Whisper, ONNX, Stable Diffusion, Coqui XTTS-v2

Alpha4Gate - Self-Improving StarCraft II Bot

Open Source

A platform where an AI improves itself: a Claude-advised loop reads its own game telemetry and auto-commits fixes only after passing tests + validation games, and a self-play arena with Elo/regression gates auto-promotes winners; every decision streams to a live React dashboard. Sole author; public on github.com/aberson.

Python 3.12, PyTorch, Stable Baselines 3, FastAPI + WebSocket, React/TypeScript

always-best-estimates - Black-Litterman Allocation Engine

Open Source | Shipped

Working end-to-end web app combining user return-views with market-implied returns via the Black-Litterman model (He-Litterman with Idzorek confidence calibration), then mean-variance optimization for long-only portfolio weights. Public: github.com/aberson/always-best-estimates.

Python, React/TypeScript

EDUCATION

M.A. Economics University of Washington — 2010

Graduate Certificate, Computational Finance University of Washington — 2010

B.S. Computer Science University of Hawaii at Hilo — 2004

B.A. Mathematics University of Hawaii at Hilo — 2004

CERTIFICATIONS

Google Cloud Certified - Generative AI Leader — Google Cloud

SKILLS

Languages: Python, R, SQL, C++, C#, JavaScript/TypeScript, VBA

AI / ML: LLMs, RAG, Agents & Agent Orchestration, Prompt Engineering, NLP, Document Extraction, LLM Evaluation & Model Benchmarking, Forecasting, Gradient-Boosted Trees (XGBoost, CatBoost), Anomaly Detection, Model Deployment

ML & Data Tooling: pandas, NumPy, scikit-learn, TensorFlow, Vertex AI, BigQuery

Engineering & Infra: FastAPI, React, Docker, Git, GCP, REST APIs, SQLite, mypy, pytest