

## Summary

ML/AI researcher/engineer/scientist in industrial R&D. Now: Looking to apply ASR lattice decoding insights into Chains-of-Reasoning in Reinforcement Learning at train and test time. DSPy prompting using English as programming language building a next high level computing platform, featuring New-as-Old: Socratic LLM dialogue as Programming, Agent enacted dialogue as Code running, LLM Inference as CPU, Context as RAM. Prior life: quantitative researcher, analyst, developer, building & trading systematic equity/FX models, including forecasting, portfolio optimisation, risk management, operations, post trade analysis, at hedge funds, proprietary trading desk, as independent portfolio manager (PM). Prior-prior life: PhD ASR in noise, MSc TTS synthesis. Spoken documents indexing & retrieval with spoken queries. Natural Language Processing. Background: analytical maths/stats/CS/EE, machine learning, statistical modelling, industrial research & development. Competent developer in C, C++, shell and tools, MATLAB, python, C#, Sql on Linux, Mac, Windows. Self-sufficient systems & network admin.

## Skills

Programming: C/C++/OpenMP, MATLAB, Python, SQL, duckdb, C#, R, Java, bash, awk, make, gdb, ddd. Platforms: Linux (Ubuntu, CentOS), MacOS, MS-Windows, GCloud, Slurm, HTCondor, Unix, VAX/VMS. Tools: Vim, Git, screen, VSCode, CLion, Jupyter, Spyder, MATLAB, Bloomberg, Reuters Cobra. Agents: Claude, Codex, Cursor, Gemini, Cline/Roo, w/local models - for python, javascript, CSS/html, C++.

## Experience

### **FutureSearch, Research Scientist (2025; remote distributed US, UK, EU)**

Created then used agents to gather and organise financial data for end-user would-be products, and for internal use. Consulted on using the presumed 'alpha' 'generated' by the AI agent(s) for potential investment.

### **F9 Research, Director (2016–present; Harpenden, UK)**

Managed a market-neutral book (~\$350M gross, ~\$35M daily trading) in EU and US markets. Quant research and development of short-horizon strategies using Python, C++, cluster and cloud resources. Rekindled ML/AI interests with llama.cpp and open weights LLMs, Aider, Gemini & Codex coding agents, DNNs for tabular data forecasting (c.f. Hugging Face TabArena), local models (qwen3, gpt-oss, GLM).

### **Marshall Wace, Senior Quantitative Researcher (2010–2016; London, UK)**

Developed and scaled market-neutral portfolios from \$100M to \$10B+ over a period of 6 years. Pioneered wrote unified R&D framework for data ingestion, signal extraction, modelling, portfolio optimization, simulation. Mentored junior researchers, implemented reproducible research workflows.

### **Credit Suisse, Quantitative Analyst (2007–2009; London, UK)**

Independently traded equity market-neutral portfolios systematically, achieving 18% lifetime returns with Sharpe 3.1. Built and operated a complete trading platform for multi-market European equities.

### **G-Research (DPFMG), Quantitative Analyst (2004–2007, London, UK)**

Designed and implemented systematic trading models for global equities and FX, contributed to fund profitability. Modelling, forecasting, risk management and multi-period optimization for mid- and high-frequency trading strategies. Operational portfolio management and production monitoring, on-call duty.

### **Canon Research Europe, Researcher (2001-2004, Bracknell, UK)**

Embedded Automatic Speech Recognition, indexing, and retrieval of spoken documents with speech.

## Education

### **Ph.D. Computer Science – University of Sheffield, UK (2000)**

Thesis: Robust Speech Recognition with Missing and Unreliable Data

### **M.Phil. Electrical Engineering – University Sv. Kiril i Metodij, Skopje, MK (1997)**

Thesis: System for text-to-speech conversion for Macedonian language

### **B.S. Electrical Engineering – University Sv. Kiril i Metodij, Skopje, MK (1993)**