

## Summary

ML/AI researcher/engineer/scientist in industrial R&D. Quantitative researcher, analyst, developer, portfolio manager building and trading systematic equity/FX models at hedge funds, proprietary trading desk, as independent PM. PhD Automatic Speech Recognition in noise, MSc Text-To-Speech synthesis, NLP spoken documents indexing and retrieval with speech. Machine learning, regression & classification, neural networks, hidden Markov models, Ngram LMs. Signal extraction, modelling, forecasting, quadratic multihorizon portfolio optimization, risk management, simulation. Systems & network admin. Looking to apply: ASR lattice decoding insights into Chains-of-Reasoning in Reinforcement Learning at train, as well as at test time; DSPy prompting using english as programming language including optimisations, in building up forthcoming high level computing-Next, featuring New-as-old: socratic Chat-as-programming, enacted Dialogue-as-code, processing LLM-as-cpu, using Context-as-ram.

## Skills

Programming: C/C++/OpenMP, MATLAB, Python, SQL, C#, R, Java, bash, awk, make, gdb, ddd.

Platforms: Linux (Ubuntu, CentOS), MacOS, MS-Windows, GCloud, Slurm, HTCondor, Unix.

Tools: Vim, Git, screen, VSCode, CLion, Jupyter, Spyder, MATLAB, Bloomberg, Reuters Cobra.

Agents: Codex, Gemini, Claude, Aider, Cline/Roo, local models - for python, javascript, CSS/html, C++.

## Experience

### F9 Research, Director (2016–Present)

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 using llama.cpp and open weights LLMs, Gemini and Aider coding agents,

DNNs for tabular data forecasting (c.f. Hugging Face TabArena), local models (qwen3, gpt-oss).

### Marshall Wace, Senior Quantitative Researcher (2010–2016)

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)

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)

Designed and implemented systematic trading models for global equities and FX, contributing 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)

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)

## Additional

Citizenship - UK and Macedonian. Languages - English, Macedonian (native), Croatian, Serbian.

Married, two grown up children. UK and MK driving licenses.

Interests include science, technology, innovation, knowledge, epistemology, culture, arts, non-fiction, systems theories, solar punk, political economy, quantitative finance, history, ethics, mentoring, e/acc.