

Chris Tyson

Education

MSc. Data Science  2019 - 2020
[University of Exeter](#)

Distinction, 84%
Machine Learning, Natural Language Processing, Statistics, Research Skills


BSc. Computer Science and Mathematics  2016 - 2019
[University of Exeter](#)

First Class Hons.
Programming, Data Structures, Algorithms, Probability, Computer Vision

A Levels  2013 - 2015
[Durham Sixth Form Centre](#)

A*A*A*AA
Mathematics, Physics, EPQ, Computer Science, Further Mathematics

Experience

Senior AI Engineer  2025 - Present
[Elsewhen](#)


- Lead AI engineer building the company's internal coding agent and orchestrator, following an independent evaluation that drove the build-from-scratch decision.
- Sole developer of Bidly, an internal AI bid-writing platform taken from zero to deployed MVP across infrastructure, backend, React frontend and agent harness engineering.
- Led development of an agentic RAG system for a Big Six advertising agency, redesigning monolithic prompt architecture into a modular pipeline that reduced query latency by 50%+ and eliminated context overflow failures.

Agents, deepagents, LangGraph, RAG, Qdrant, SWE-Bench, GCP, React

Head of Machine Learning  2024 - 2025
[glass.ai](#)


- Established machine learning research function, directing technical strategy for company classification and discovery platform serving policy analysts and economists.
- Built RAG pipelines and autonomous web scraping agents to extract insights from unstructured data at scale.
- Independently delivered AI-powered company discovery projects for major institutional clients including UK Government departments, the European Commission, and the Australian Government.

RAG, Agents, DSPy, Azure, Kubernetes

Data Scientist Engineer  2021 - 2024
[glass.ai](#)

- Developed core NLP and ML pipelines to construct targeted company datasets from large-scale web-crawled data, enabling precise sector-based categorization.

Contact


 Location
London, United Kingdom

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[christyson.co.uk](#)

 Email
chris-tyson@outlook.com

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Certifications

 Google Professional ML Engineer
Passed 23/09/25

Skills

 AI
LangChain, LangGraph, Qdrant, DSPy

 Machine Learning
PyTorch, Keras, TensorFlow

 NLP
transformers, huggingface, nltk, spacy

 Data Science
pandas, numpy, matplotlib

 Programming
Python, R, Java, MATLAB, kdb+

 APIs
fastapi, flask, celery, redis

 Cloud & DevOps
GCP, Azure, Docker, Kubernetes

 Other
Neo4J, Svelte, Git, Grafana, LaTeX, SQL

- Researched and implemented novel classification paradigms including PU-Learning with GAN-inspired architectures and preference-based approaches using DPO-style loss functions.
- Optimized model performance through custom loss functions derived from genetic algorithms and 4-variate Taylor Series expansions.

Python, PyTorch, Transformers, Prompt Engineering, Web Scraping

Software Engineer  [Internship \(2018, 2019\)](#), [Grad Scheme \(2020-2021\)](#)
[JPMorgan Chase & Co.](#)

- Modernized Continuous Integration pipelines using Jenkins and Groovy scripting, improving build automation and deployment efficiency.
- Developed and maintained real-time interactive dashboards for eTrading stakeholders using kdb+ and Grafana, visualizing large-scale trading data.

kdb+, Java, Groovy, Grafana, Jenkins, Docker

Projects

Internal Coding Agent ~ [Elsewhen](#)  2026

Benchmarked an internal coding agent against 7 comparators on SWE-Bench, surfacing critical failure modes that drove a build-from-scratch decision. Now lead AI engineer building our own autonomous agent on the OpenHands Software Agent SDK, with a multi-agent orchestrator inspired by OpenAI's Symphony.

OpenHands SDK, Multi-Agent Orchestration, Harness Engineering, SWE-Bench

Biddy ~ [Elsewhen](#)  2026

Internal AI bid-writing platform, built solo from zero to deployed MVP. Single-agent harness on deepagents with filesystem-as-context over parsed RFPs and semantic search over a Qdrant-indexed knowledge base of past bids and case studies.

deepagents, LangGraph, Agents, Qdrant, React, GCP

Prompt to Audience ~ [Elsewhen](#)  2025 - 2026

Modular agentic RAG pipeline translating natural language queries into audience segments through structured query decomposition and Boolean logic assembly. Implemented constraint-specific retrieval and selection strategies using Qdrant with tool calling for rule-based processing.

LangGraph, LangChain, Qdrant, Agents, Prompt Engineering

Company Discovery ~ [glass.ai](#)  2023 - 2024

Agentic company discovery pipeline transforming user inputs into taxonomies through iterative refinement. Agents generate classification prompts, construct training datasets, evaluate subsector relevance, and web-crawl to discover and validate companies.

Agents, Prompt Engineering, DSPy, Active Learning, Web Scraping

Predictive Adversarial Learning ~ [glass.ai](#)  2022

Researched PU-Learning using only positive and unlabelled text data with a GAN-inspired tandem transformer. Derived custom loss functions through genetic algorithm optimization of 4-variate Taylor Series expansions, and developed preference classification using DPO-style loss with LLM-labeled pairs.


Machine Learning, PyTorch, Transformers, Genetic Algorithms

MSc. Thesis: Electoral Prediction ~ [University of Exeter](#)  2020


Constituency-level electoral prediction leveraging Twitter data from the 2019 UK General Election, with stance detection, probabilistic geolocation, and graph-theoretic analysis of voter behaviour. Received publication recommendation (77% grade).

Machine Learning, NLP, Network Analysis, Sentiment Analysis, Twitter API

Achievements

 Dean's Commendation
Exceptional Performance on MSc. Data Science

 MSc. Award
Highest Departmental Performance on MSc. Data Science

 Machine Learning
99% in MSc. Machine Learning module, with two perfect scores