Cillian Berragan

Founding AI Engineer, Nebula | Glasgow, Scotland

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I build AI agents and the systems that run them. At Nebula I own the backend: agent execution, durable workflows and integrations with hundreds of apps. I also wrote fastbrowse, an open-source browser agent. PhD in natural language processing.

EXPERIENCE

Founding AI Engineer Nebula — Feb 2026 - Present | Remote

- Nebula is a multiplayer workspace where teams work alongside AI agents that have real tools, memory and their own computers.
- Own the backend as its primary engineer: the agent execution engine, durable workflow orchestration, multi-agent coordination, persistent memory and real-time streaming.
- Built the integrations that let agents act across hundreds of apps, and the APIs behind the desktop, mobile and CLI clients.
- Wrote fastbrowse, an open-source browser agent: a choice model picks each action from the controls on the page, and every claim in an answer cites a quote from it.

Software Engineer thirdweb — Mar 2025 - Mar 2026 | Remote

- Built thirdweb AI, a conversational agent platform for working with onchain infrastructure and thirdweb developer tools.
- Became its primary backend engineer, across RAG pipelines, API development and agent tooling.

Machine Learning Engineer Consumer Data Research Centre — Dec 2023 - Mar 2025 | Liverpool / Remote

- Built a retrieval-augmented generation search system over a combined UK data catalogue, using LangChain, ETL pipelines and vector search.
- Applied NLP to improve data discovery and access across the catalogue.

PhD Researcher Geographic Data Science Lab — Sep 2019 - Dec 2023 | Liverpool

- NLP and geography research at the University of Liverpool.
- Extracted and mapped cognitive place associations from Reddit and Twitter text.

Data Scientist Consumer Data Research Centre (Leeds) — Feb 2021 - May 2022 | Liverpool, part-time

- Access to Healthy Assets & Hazards (AHAH): a postcode-to-PoI drive-time index across England.

EDUCATION

PhD, Natural Language Processing & Geography University of Liverpool — 2019 - 2023

Thesis: Exploring Place from the Perspective of Informal Social Media Text.

MSc, Geographic Data Science University of Liverpool — 2018 - 2019

Distinction (82%). Dissertation 85%: parametric classification of UK rural roads from LiDAR.

PUBLICATIONS

Transformer based named entity recognition for place name extraction from unstructured text
International Journal of Geographical Information Science, 2023 | doi.org/10.1080/13658816.2022.2133125

Overture Point of Interest data for the United Kingdom: a comprehensive, queryable open data product, validated against Geolytix supermarket data
Environment and Planning B: Urban Analytics and City Science, 2024 | doi.org/10.1177/23998083241263124

Mapping Great Britain's semantic footprints through a large language model analysis of Reddit comments
Computers, Environment and Urban Systems, 2024 | doi.org/10.1016/j.compenvurbsys.2024.102121

Mapping cognitive place associations within the United Kingdom through online discussion on Reddit
Transactions of the Institute of British Geographers, 2024 | doi.org/10.1111/tran.12669

Exploring Place from the Perspective of Informal Social Media Text
PhD thesis, University of Liverpool, 2024 | livrepository.liverpool.ac.uk/3180909/

SKILLS

Python | TypeScript | AI agents | Durable workflows (DBOS) | Pydantic AI | FastAPI | PostgreSQL / pgvector | MCP | Browser automation | LLM evals | RAG | LangChain | Natural Language Processing | Geospatial data