






andrewwang27 
 andrewwango.github.io 
 andrew.wang@ed.ac.uk 
 Google Scholar 
 Edinburgh, UK 

PhD student in ML for imaging at the University of Edinburgh.

Freelance data scientist with a wide range of skills. [\[website\]](#)

Campaigner, speaker and writer on access to nature. [\[about\]](#)

Speak to me in    !

EDUCATION

'23-'27 PhD, School of Engineering, University of Edinburgh

- **Focus:** Unsupervised deep learning algorithms for solving inverse imaging problems. We rarely have ground truth in many critical imaging scenarios, such as accelerating medical imaging, higher resolution Earth observation, electron microscopy. Supervised by [Prof. Mike Davies](#).
- **Interests:** Computer vision, deep learning, inverse problems, medical imaging, Earth observation

'18-'22 MEng Information & Computer Engineering, University of Cambridge Distinction (first class)

PROFESSIONAL EXPERIENCE

Data Scientist / AI Engineer

Kainos, Birmingham (08/'22-08/'23)

- **Client** Workday | Security analysis tool using graph data science **Skills** networkx, Neo4j
- **Client** DVSA | Geospatial network recommendation tool **Skills** PostGIS, QGIS, OS MasterMap
- **Client** Internal | Curated internal MLOps & CI/CD best practices **Skills** Azure ML, Azure DevOps
- **Client** Internal | Gov.uk web intelligent search bar **Skills** OpenAI API, web-dev

Data Science Consultant Intern [\[blog\]](#)

Data Reply UK, London (05-07/'21)

RESEARCH, PUBLICATIONS & PRESENTATIONS

[\[poster\]](#) **Workshop.** A. Wang, "Learning to reconstruct accelerated dynamic MRI without ground truth", International Workshop on Mathematical Imaging and AI Algorithms, IPTA 2024, University of Strathclyde, Glasgow, Dec 2024.

[\[paper\]](#) **Conference paper.** A. Wang, M. Davies, "Fully Unsupervised Dynamic MRI Reconstruction via Diffeo-Temporal Equivariance", IEEE International Symposium on Biomedical Imaging (ISBI), Houston, 2025. [\[blog\]](#)

[\[poster\]](#) **Workshop.** A. Wang, "Perspective-Equivariant Imaging: an Unsupervised Framework for Pansharpening", Maths4DL Geometric Deep Learning workshop, University of Cambridge, June 2024.

[\[paper\]](#) **Conference paper.** A. Wang, M. Davies, "Perspective-Equivariance for Unsupervised Imaging with Camera Geometry", IEEE/CVF European Conference on Computer Vision (ECCV) TradiCV Workshop (Oral), 2024. [\[blog\]](#)

[\[website\]](#) **Open-source.** J. Tachella, D. Chen, S. Hurault, M. Terris, A. Wang, "DeepInverse: A deep learning framework for inverse problems in imaging". Lead developer, 2024-current. Contributions include [GANs](#), [advanced MRI](#), [satellite imaging for remote sensing](#), [equivariant imaging](#), [invertible image transforms](#), [self-supervised algorithms](#). [\[blog\]](#)

[\[thesis\]](#) **Master's research in physics-informed ML.** "Dynamic latent spaces with statistical finite elements", 2022.

[\[paper\]](#) **With Alan Turing Institute.** J. Walsh, O. Kesa, A. Wang et al., "Near Real-Time Social Distance Estimation in London", **The Computer Journal**, 2023. Winner of OUP [Wilkes Award](#) 2024. [\[press\]](#) [\[press2\]](#) [\[blog\]](#)

[\[paper\]](#) **With CentraleSupélec.** P. Houdouin, A. Wang et al., "Robust Classification with Flexible Discriminant Analysis in Heterogeneous Data", IEEE International Conference on Acoustics, Speech and Signal Processing, 2022. [\[blog\]](#)

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FREELANCE

Please see my [website](#) for previous projects including data analysis, geospatial data, web dev & ML.

SKILLS

Languages: English (native), French (CEFR C2 – fluent), Mandarin (native), German (CEFR B2)

Certifications: [certified on AWS](#), [certified Azure](#) and [Azure AI](#), [SQL for Data Science](#), [Neo4j Graph Data Scientist](#), [Green Software Practitioner](#)

Software: Agile dev, GitHub CI/CD, Docker, Unix, MLFlow, [wandb](#), Tableau, TypeScript, MATLAB, C++

Python: [pandas](#), [matplotlib](#), OpenCV, PyTorch, [scikit-learn](#), [tensorflow](#) basics, [seaborn](#), [plotly](#), [nltk](#), [jupyter](#), [networkx](#), [streamlit](#). Clean code, functional programming and test-driven dev.

Geospatial: QGIS, PostGIS, OpenStreetMap API, OS MasterMap, Google Maps API, [geopandas](#), [folium](#)