

Maeve Hutchinson

maeve.hutchinson@citystgeorges.ac.uk ◇ maevehutchinson.com

EDUCATION

PhD in Computer Science

Thesis: Data Visualisation Mediated through Natural Language Interaction

City St George's, University of London

02/2023 – 05/2027 (*Anticipated*)

- Committee: Dr Pranava Madhyastha, Dr Radu Jianu, and Dr Aidan Slingsby.
- Awarded a 3-year Doctoral Studentship by the School of Science and Technology.
- Researching the use of LLMs and Multimodal LLMs to aid users in visual analytic systems.
- Building real-world datasets and benchmarks to test and improve models' visual reasoning capabilities.

MSc in Data Science (*with Distinction*)

Thesis: Extraction and Evaluation of Causal Relations From Aero-Engineering Text

City St George's, University of London

09/2021 – 01/2023

- Used BERT to identify fault-related causal relationships from unstructured technical documentation to support diagnostic and maintenance processes in aero-engineering.

BSc in Physics

Dissertation: Agent-Based Modelling as a Tool for Understanding Financial Crises

Imperial College London

12/2018 – 06/2021

- Explored the use of physics-based models from information theory as applied to model financial markets.

PUBLICATIONS

Journal Papers:

Maeve Hutchinson, Radu Jianu, Aidan Slingsby & Pranava Madhyastha. *Foundation Model Assisted Visual Analytics: Opportunities and Challenges.*, Computers & Graphics, vol. 130, p. 104246, Aug. 2025.
doi:10.1016/j.cag.2025.104246

Conference Papers:

Maeve Hutchinson, Radu Jianu, Aidan Slingsby, Jo Wood & Pranava Madhyastha. *Capturing Visualization Design Rationale.* IEEE Visualization and Visual Analytics (VIS), Nov. 2025. Preprint:
doi:10.48550/arXiv.2506.16571

Radu Jianu, Maeve Hutchinson Natalia Andrienko, Gennady Andrienko, Mai Elshehaly, & Aidan Slingsby. *Mind-Mapping Data Analysis with LLMs: From Vision to First Steps.* Computer Graphics & Visual Computing (CGVC), Sep. 2025. doi:10.2312/cgvc.20251221

Maeve Hutchinson, Radu Jianu, Aidan Slingsby, Jo Wood, & Pranava Madhyastha. *Chart Question Answering from Real-World Analytical Narratives.* Association for Computational Linguistics (ACL), Jul. 2025.
doi:10.18653/v1/2025.acl-srw.50

Maeve Hutchinson, Radu Jianu, Aidan Slingsby & Pranava Madhyastha. *LLM-Assisted Visual Analytics: Opportunities and Challenges.* In: Computer Graphics & Visual Computing (CGVC), Sep. 2024.
doi:10.2312/cgvc.20241237

Maeve Hutchinson, Aidan Slingsby, Radu Jianu & Pranava Madhyastha. *Towards Visualisation Specifications from Multilingual Natural Language Queries using Large Language Models.* EuroVis, Jun. 2023.
doi:10.2312/evp.20231072

AWARDS AND PRIZES

Best Full Paper Award Computer Graphics & Visual Computing 2024

TEACHING EXPERIENCE

Graduate Teaching Assistant

Neural Computing; Big Data; Data Visualisation;
Mathematics for Computing

City St George's, University of London

10/2023 – *present*

Associate Fellow, Advance Higher Education (AFHEA)

10/2024

ACADEMIC SERVICE

Reviewer ACL Rolling Review, ACL FEVER, Computers & Graphics Journal, EuroVis

Programme Committee Computer Graphics & Visual Computing