#### PUBLISHED RESEARCH

**Mahon L.** & Lukasiewicz T. (2024). Hard Regularization to Prevent Collapse in Online Deep Clustering without Data Augmentation, *Association for the Advancement of Artificial Intelligence*.

Meo C., **Mahon L.** Goyal A & Dauwels J. (2024) \$\alpha\$-TCVAE: On the Connection between Disentanglement and Diversity, *International Conference on Learning Representations*.

**Mahon L**. & Lukasiewicz T. (2023). Minimum Description Length Clustering to Measure Meaningful Image Complexity, *Pattern Recognition*.

**Mahon L.**, Vogel C. (2023). The Proof is in the Pudding: Using Automated Theorem Proving to Generate Cooking Recipes, *The Journal of Language Technology and Computational Linguistics*.

d'Amato C., Monin P., **Mahon L.** & Stamou G. (2023) Machine Learning and Knowledge Graphs: Existing Gaps and Future Research Challenges, *Transactions on Graph Data and Knowledge*.

**Mahon L.** & Lukasiewicz T. (2022). Efficient Deep Clustering of Human Activities and How to Improve Evaluation, *Asian Conference on Machine Learning.* 

**Mahon L**. & Lukasiewicz T. (2021). Selective Pseudo-label Clustering. German Conference on Artificial Intelligence (Künstliche Intelligenz) Springer, Cham.

**Mahon L.**, Giunchiglia E., Li B., Lukasiewicz L. (2020). Knowledge Graph Extraction from Videos, *International Conference on Machine Learning and Applications*.

Saurí, R., **Mahon, L.**, Russo, I., & Bitinis, M. (2019). Cross-Dictionary Linking at Sense Level with a Double-Layer Classifier. In *2nd Conference on Language, Data and Knowledge* 

### **UNDER REVIEW**

**Mahon L**., Abend O., Berger U., Demuth K., Johnson M., Steedman M. A Multilingual Model of Child Language Acquisition.

**Mahon L.**, Shah L. & Lukasiewicz T. Correcting Flaws in Common Disentanglement Metrics, *Transactions on Machine Learning Research*.

**Mahon, L** & Lapata, M. (under review). A Modular Approach for Multimodal Summarization of TV Shows. Association of Computational Linguistics (ACL).

Szubert I., Abend O., Schnieder N., Gibbon S., **Mahon L.**, Goldwater S., Steedman M. (2023) Cross-linguistically Consistent Semantic and Syntactic Annotation of Child-directed Speech, *Language Resources and Evaluation*.

# **RESEARCH IN PROGRESS**

**Mahon L**. The Theorem of Babel: a Puzzle Concerning Collective Communication through Language.

Das T., **Mahon L**. & Lukasiewicz T. Video Annotation with Knowledge Graphs. **Mahon L**., Steedman M. Human-like Learning of Long-range Syntactic Dependencies.

**Mahon L.**, Lapata M, Towards Semantic Video Segmentation for Long-form Summarization.

### EDUCATION

2019-2022, DPhil (PhD) in Computer Science, University of Oxford
2018-2019 MSc in Computer Science, University of Oxford (dist.)
2016-2017 MPhil Speech and Language Processing, Trinity College Dublin (dist.)
2016, B.A. Maths and Philosophy, Trinity College Dublin (first-class honours)
2014 B.A. Maths and Philosophy, Trinity College Dublin, Foundation Scholarship

# TEACHING

2022, Royal Institution Masterclass Demonstrator, Oxford Computer Science
2020, Advanced ML and Al Lab Demonstrator, Oxford Computer Science
2020, ML and Al Teaching Assistant, Oxford Computer Science
2019, Royal Institution Masterclass Assistant, Oxford Computer Science

# OTHER EXPERIENCE

2024, PC member for an ICLR workshop "Deep Learning and Mathematics"

- 2023-pres., Editorial Board member: *Transactions on Graphs, Data and Knowledge* (new journal led by A. Hogan, I. Horrocks, A. Hotho and L. Kagal)
- 2021-2022, MSc Supervision cosupervised to distinction in her thesis, now collaborating on further research

2021-2022, Good Data Institute Fellow

a team-leader role for a small team of pro bono data scientists to assist an educational charity in Tamil Nadu, we analysed survey data to assess the impact of their Children's Learning Centres

- 2019-2021 College Environment Officer, Linacre College ran nature and conservation-based events, including an academic seminar series
- 2020, Oxford Artificial Intelligence Society, OxAI Labs deep learning for wildfire detection and forecasting
- 2017-2018, Language Technologist, Oxford University Press (OUP) industry role in the Oxford Dictionaries department, developed a machine learning tool to link data from different online dictionaries