Tom Sherborne

Email   tom.sherborne@ed.ac.uk
Homepage   tomsherborne.github.io
Phone   +44 7378 481481
Research   SEMANTIC SCHOLAR

Summary

- Finalizing a PhD in NLP researching cross-lingual transfer and multilinguality in structured prediction tasks. Four first author papers in ACL, EMNLP, and TACL with expected completion in January 2024.

- Seven years experience in NLP research including cross-lingual transfer, machine translation evaluation, and multimodal generative models. Recent work focuses on multilinguality using latent variables, optimization algorithms for domain adaptation, and parameter compression for large language models.

- Pursuing an industry role for research in expanding NLP to new languages & communities, model efficiency, and theoretical & empirical analysis of optimization.

Education

2019 - Now	**PhD** Computer Science	University of Edinburgh
	Thesis: Learning Cross-lingual Transfer Through The Lens Of Semantic Parsing	**Completion**: 01/24 (expected)
	Advisor: Mirella Lapata	
	Low resource cross-lingual transfer for semantic parsing and structure prediction. First author papers modeling machine translation, zero-shot transfer, meta-learning and optimal transport over latent variable models.	

2018 - 2019	**MSc(R)** Data Science	University of Edinburgh
	Thesis: Bootstrapping a Crosslingual Semantic Parser	**Award**: DISTINCTION (79%)
	Advisor: Mirella Lapata	

2017 - 2018	**MPhil** Advanced Computer Science	University of Cambridge
	Thesis: Evaluating Image Description Systems with Truth-Conditional Semantics	**Award**: DISTINCTION (85%)
	Advisor: Ann Copestake	

2013 - 2017	**MEng** Electronic Engineering	University College London
	Undergraduate Bachelor & Master Combined Degree Program	**Award**: 1ST HONS (84%)
2015 - 2016	Columbia University — Exchange Student (GPA: 3.84)	

Employment

Apr. - Oct. 2023 2023	**Allen Institute for AI** — AllenNLP Research Intern	
	Cross-lingual and cross-domain optimization & training dynamics with Hao Peng and Pradeep Dasigi.	

Sep. - Mar. 2018 2023	**University of Edinburgh** — Informatics Teaching Assistant	
	Teaching Assistant for Deep Learning & Natural Language Processing class for 200+ students.	
	Lead Instructor for GPU Programming and Cluster Training using PyTorch and Slurm.	

Jun - Sep. 2018 2018	**Apple** — Siri Machine Learning Intern	
	Cross-lingual spoken language understanding & sequence tagging with Diarmuid Ó Séaghdha.	

Recent Publications

ICLR24	TRAM: Bridging Trust Regions and Sharpness Aware Minimization
	Tom Sherborne, Naomi Saphra, Pradeep Dasigi and Hao Peng
	Submission under review

TACL23	*Optimal Transport Posterior Alignment for Cross-lingual Semantic Parsing*
	Tom Sherborne, Tom Hosking and Mirella Lapata
	Transactions of the Association for Computational Linguistics (2023): Accepted Pending Publication

ACL23	*Extrinsic Evaluation of Machine Translation Metrics*
	Nikita Moghe, **Tom Sherborne**, Mark Steedman and Alexandra Birch
	Proceedings of ACL 2023, **Outstanding Paper Award**

TACL23	*Meta-Learning a Cross-lingual Manifold for Semantic Parsing*
	Tom Sherborne and Mirella Lapata
	Transactions of the Association for Computational Linguistics (2023) 11: 49–67

Skills & Professional Service

TECHNICAL	Python (NumPy, SciPy, Pandas, PyTorch), Git, Bash/UNIX, Slurm, Docker, LaTeX.
REVIEWER	JMLR, ACL & ARR, EMNLP, NeurIPS, ICML. ICLR22 highlighted reviewer, ACL23 best reviewer.
VOLUNTEER	ACL2020, ACL2021, EMNLP2021, ACL2023.