

Bohui Zhang

Contact Information	bohui.zhang@kcl.ac.uk https://bohuzhang.github.io/	
Research Interests	My research interests mainly lie in knowledge graphs, natural language processing, and explainable AI, especially on automatic and explainable knowledge graph construction and natural language processing in knowledge graph construction, especially the usage of prompt engineering and large language models. I am open to new topics.	
Academic Background	King's College London (KCL)	2022 - 2026
	Ph.D. in Computer Science Supervisors: Prof. Elena Simperl, Dr. Albert Meroño Peñuela	
	University of Southern California (USC)	2020 - 2021
	M.S. in Applied Data Science	
Work Experience	University of Waterloo (UWaterloo)	2015 - 2019
	B.S. in Materials and Nanosciences, <i>Dean's Honours List</i>	
	Beijing Jiaotong University (BJTU)	2015 - 2019
	B.Eng. in Nanomaterials and Nanotechnology	
Work Experience	Information Sciences Institute , Student Researcher	09/2021 - 12/2021
	<ul style="list-style-type: none">• Supervisor: Dr. Filip Ilievski• Investigated the feasibility of enriching Wikidata with structured data sources from the linked open data (LOD) cloud.• Proposed a method that consists of several steps: gap detection, external graph selection, schema alignment, knowledge retrieval, and validation, implemented the procedure using the Knowledge Graph Toolkit (KGTK).• Evaluated the method on enriching Wikidata with two LOD sources: DBpedia and Getty Vocabularies. The experiments showed that the LOD-based method can enrich Wikidata with millions of new high-quality statements in a short time.	
Work Experience	Alibaba Cloud , Machine Learning Intern	05/2021 - 08/2021
	<ul style="list-style-type: none">• Mentor: Jingjun (Alvin) Chu• Worked on a Neural Architecture Search (NAS) system for optimizing models in search space defined by ProxylessNAS, used on image classification and feature extraction tasks based on dataset collecting from group's retail sector.• Improved the model training process using knowledge distillation and improved the optimal model architecture searching process in various hardware environments using policy gradient algorithm based on target accuracy, FLOPs and latency.• The optimal models deployed on terminal machines achieved model compression for more than 60% decrease on FLOPs while improving rank1 and rank6 compared with state-of-the-art MobileNetV2 models and keeping the top1 accuracy above 98%.	

Publications [Google Scholar]	<ol style="list-style-type: none"> Bohui Zhang, Albert Meroño Peñuela, Elena Simperl, Towards Explainable Automatic Knowledge Graph Construction with Human-in-the-loop, In <i>International Conference on Hybrid Human-Artificial Intelligence (HHAI)</i>, 2023 Bohui Zhang, Filip Ilievski, Pedro Szekely, Enriching Wikidata with Linked Open Data, In <i>Wikidata Workshop co-located with International Semantic Web Conference</i>, 2022 								
Teaching Assistant	<div> 7CUSMNDANetwork Data AnalysisKCL, 2022-23 Semester 2 <ul style="list-style-type: none"> Module leader: Dr. Albert Meroño Peñuela Designed and delivered coding lab sessions, topics covered included graph theory, spatial and social network analysis, graph embedding, and semantic web. </div> <div> 5CCS2FC2Foundations of Computing IIKCL, 2022-23 Semester 1 <ul style="list-style-type: none"> Module leader: Dr. Christopher Hampson Delivered lab sessions on algorithm problems, topics covered included P/NP, SAT solving, approximation, linear programming, and probabilistic algorithms. </div>								
Awards	<table> <tr> <td>Graduation Dean’s Honours List</td> <td>UWaterloo, 2019</td> </tr> <tr> <td>Waterloo-Beijing Jiaotong University Tuition Award</td> <td>BJTU, 2016, 2017, 2018</td> </tr> <tr> <td>Excellence Scholarship of Academic Activities</td> <td>BJTU, 2017 - 2018</td> </tr> <tr> <td>Excellence Scholarship of Social Activities</td> <td>BJTU, 2015 - 2016</td> </tr> </table>	Graduation Dean’s Honours List	UWaterloo, 2019	Waterloo-Beijing Jiaotong University Tuition Award	BJTU, 2016, 2017, 2018	Excellence Scholarship of Academic Activities	BJTU, 2017 - 2018	Excellence Scholarship of Social Activities	BJTU, 2015 - 2016
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Excellence Scholarship of Social Activities	BJTU, 2015 - 2016								
Academic Service	<p>Organizer for Knowledge Prompting Hackathon 2023. Reviewer for ACM CHI 2023. Member of Knowledge Graphs Interest Group at the Alan Turing Institute.</p>								
Skills	<p>Languages: Python, Java, JavaScript, MATLAB Frameworks: PyTorch, transformers, KGTK Semantic Web Tech Stacks: OWL, RDF, LOD, SPARQL, PROV Databases: MongoDB, MySQL, Neo4j</p>								