Hossein A. (Saeed) Rahmani

CONTACT INFORMATION	<pre></pre>	UCL Centre for Artificial Intelligence Dept. of Computer Science 90 High Holborn University College London United Kingdom, WC1V 6BH		
Moreover, my position at the Alan Turing Institute does not have any conflict with the in positions.				
RESEARCH INTERESTS	 ☐ Multi-Agent Evaluation and Self-Improvement ☐ LLM-as-a-Judge ☐ LLM Task Planning ☐ Responsible RecSys/Search 	 □ Synthetic Data Generation □ LLM Evaluation and Benchmark □ LLM Personalization □ Search and Retrieval 		
Education	 University College London Ph.D. in Computer Science Affiliation: UCL Web Intelligent Group Advisors and Mentors: Prof. Emine Yilmaz and Nick 	London, United Kingdom Dec. 2022 – Nov. 2026 (Expected)		
	 University of Zanjan M.Sc. in Computer Engineering (Distinction) Thesis: Context-aware Point-of-Interest Recommender States Advisors and Mentors: Prof. Mohsen Afsharchi and D 			
Internship Experience	 The Alan Turing Institute PhD Enrichment Student Team: Understanding the Capabilities of Foundation Mo Working on Reasoning and Self-Improvement 	London, United Kingdom Jan. 2025 – Jun. 2025 edels		
	 Thomson Reuters Labs Applied Scientist Intern - NLP Supervised by Prof. Dell Zhang and Dr. Grace Lee Working on LLMs for Legal Tasks Evaluation 	London, United Kingdom Sep. 2023 – July. 2024		
	Amazon Alexa AI Alexa Prize TaskBot Challenge • \$250,000 Research Grant	London, United Kingdom Apr. 2021 – Dec. 2022		
	 Università della Svizzera italiana (USI) Research Intern, Information Retrieval Group Supervised by Prof. Fabio Crestani Working on Context-aware Recommendation Systems 	Lugano, Switzerland Sep. 2019 – Dec. 2019		
Media Coverage	Microsoft Research Blog [20 Highlighted JudgeBlender as a cost-effective technique for automatic judgment.			
	Thomson Reuters Innovation [2025] Featured my work on LLM-as-a-Judge as part of my internship at TR Labs as an innovation.			
	Thomson Reuters Lab Medium [©] Published my articles on Can LLMs Replace Human Judger.	nent in Evaluation?		

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UKRI CDT In Foundational AI [&

2024

Two Foundational AI CDT students awarded places on the Turing Enrichment Scheme

Microsoft Research Blog [

2024

arXiv 2025

Highlighted SynDL as a resource for synthetic evaluation in information retrieval.

SELECTED
PUBLICATIONS
Full list, see

G SCHOLAR

Preprints & Under Submission

- 22. Are Large Language Models Task-based Self-Correction? Working Progress

 Hossein A. Rahmani, Satyapriya Krishna, Marwa Abdulhai, Emine Yilmaz
- 21. Benchmarking LLMs for Task Understanding and Planning
 Hossein A. Rahmani, Fanghua Ye, Bin Wu, Marzieh Fadaee, Emine Yilmaz

 Working Progress
- 20. Towards Self-Improvement through Multi-agent Debate Feedback Under Review Hossein A. Rahmani, Emine Yilmaz, Nick Craswell, Bhaskar Mitra
- 19. Do LLMs Favor Towards Synthetic Test Collection for Evaluation? Under Review Hossein A. Rahmani, Varsha Ramineni, Emine Yilmaz, Nick Craswell, Bhaskar Mitra
- Judgements

 <u>Hossein A. Rahmani</u>, Clemencia Siro, Mohammad Aliannejadi, Nick Craswell,
 Charles L. A. Clarke, Guglielmo Faggioli, Bhaskar Mitra, Paul Thomas, Emine Yilmaz

18. Judging the Judges: A Collection of LLM-Generated Relevance

- 17. Large Language Models for Legal Tasks Evaluation

 Hossein A. Rahmani, Risako Owan, Grace E. Lee, Sally Gao, Frank Schilder,
 Dell Zhang, Emine Yilmaz
- 16. LLMJudge: LLMs for Relevance Judgments

 Hossein A. Rahmani, Emine Yilmaz, Nick Craswell, Bhaskar Mitra, Paul Thomas,
 Charles L. A. Clarke, Mohammad Aliannejadi, Clemencia Siro, Guglielmo Faggioli
- 15. Understanding the Role of User Profile in the Personalization of LLMs arXiv 2024 Bin Wu, Zhengyan Shi, Hossein A. Rahmani, Varsha Ramineni, Emine Yilmaz

(Selected) Peer-reviewed Conference

14. JudgeBlender: Ensembling Judgments for Automatic Relevance The Web Conf., 2025 Assessment

Hossein A. Rahmani, Emine Yilmaz, Nick Craswell, Bhaskar Mitra



BOR

13. SynDL: A Large-Scale Synthetic Test Collection for Passage The Web Conf., 2025 Retrieval

Hossein A. Rahmani, Xi Wang, Emine Yilmaz, Nick Craswell, Bhaskar Mitra, Paul Thomas

12. Beyond Internal Data: Constructing Complete Datasets for NeurIPS, 2024
Fairness Testing

Varsha Ramineni, <u>Hossein A. Rahmani</u>, David Berber, Emine Yilmaz Algorithmic Fairness through the Lens of Metrics and Evaluation at NeurIPS 2024

11. LLM4Eval: Large Language Model for Evaluation in IR

Hossein A. Rahmani, Clemencia Siro, Mohammad Aliannejadi, Nick Craswell,
Charles L. A. Clarke, Guglielmo Faggioli, Bhaskar Mitra, Paul Thomas, Emine Yilmaz

	10. Synthetic Test Collections for Retrieval Evaluation SIGIR, 2 Hossein A. Rahmani, Nick Craswell, Emine Yilmaz, Bhaskar Mitra, Daniel Campos	:024			
	9. Natural Language User Profiles for Transparent and Scrutable Recommendations Jerome Ramos, Hossein A. Rahmani, Xi Wang, Xiao Fu, Aldo Lipani	<u>24</u>			
	8. Clarifying the Path to User Satisfaction: An Investigation into EACL, & Clarification Usefulness Hossein A. Rahmani, Xi Wang, Mohammad Aliannejadi, Mohammadmehdi Naghiaei, Emine Yilmaz	2024			
	7. Improving Conversational Recommendation Systems via Bias Analysis and Language-Model-Enhanced Data Augmentation Xi Wang, <u>Hossein A. Rahmani</u> , Jiqun Liu, Emine Yilmaz	!023			
	6. Do LLMs Selectively Encode the Goal of an Agent's Reach? Laura Ruis, Arduin Findeis, Herbie Bradley, Hossein A. Rahmani, Kyoung Whan Choe, Edward Grefenstette, Tim Rocktaschel	2023			
	5. A Survey on Asking Clarification Questions Datasets in Conversational ACL, 2023 Systems Hossein A. Rahmani, Xi Wang, Yue Feng, Qiang Zhang, Emine Yilmaz, Aldo Lipani				
	4. When and What to Ask Through World States and Text IGLU@NeurIPS, 2 Instructions Zhengxiang Shi, Jerome Ramos, To Eun Kim, Xi Wang, Hossein A. Rahmani, Aldo Lipani				
	3. Towards Confidence-aware Calibrated Recommendation CIKM, 2 Mohammadmehdi Naghiaei, Hossein A. Rahmani, Mohammad Aliannejadi, Nasim Sonboli	2022			
	2. Exploring the Impact of Temporal Bias in Point-of-Interest RecSys, 2 Recommendation Hossein A. Rahmani, Mohammadmehdi Naghiaei, Ali Tourani, Yashar Deldjoo	!022			
	1. Experiments on Generalizability of User-Oriented Fairness SIGIR, 2 in Recommender Systems Hossein A. Rahmani, Mohammadmehdi Naghiaei, Mahdi Dehghan, Mohammad Aliannejad				
	0. CPFair: Personalized Consumer and Producer Fairness Re-ranking SIGIR, 2 for Recommender Systems Mohammadmehdi Naghiaei, Hossein A. Rahmani, Yashar Deldjoo	2022			
Awards, Grants, and Funding	Ranked 1st in TREC iKAT 2023, LLMs for Conversational Search NeurIPS 2022 IGLU Challenge Research Prize Amazon Alexa Prize Competition Research Grant UCL PhD Studentship, UKRI CDT in Foundational AI, UCL School of AI Scholarship, Pi School, Italy Student Registration Grant for attending CSCW Student Registration Grant for attending CIKM	2024 2023 2022 2022 2026 2021 2021 2021 2020			

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	Student Registration Grant for attending CLEF SERI Mobility Grant, Zurich University of Applied Sciences (ZHAW), Switzerland Data Science Winter School Grant, University of Bonn, Germany Third-rank Graduate Amongst BSc Students, University of Zanjan, Iran Ranked 3rd in Technical University Olympiad, Technical and Vocational University, Iran Honorary Admission to Bachelor Program, Technical University of Shiraz, Iran		
Work Experience	Virtual Manufacturing Inc. Applied Scientist	Californ Oct. 2021 – Nov	
			gapore t. 2021
	Pi School Research Scholar	Room Apr. 2021 – Jur	n, Italy n. 2021
	Sanay Co. Data Scientist	Zanja: Apr. 2020 – Jan	n, Iran . 2021
TEACHING EXPERIENCE	University College London, Teaching Assistant London, United Kingdom Statistical Natural Language Processing (Prof. Pontus Stenetorp) Artificial Intelligence for Sustainable Development (Prof. Maria Perez-Ortiz) Foundation of Artificial Intelligence (Dr. Sahan Bulathwela) Information Retrieval and Data Mining (Prof. Emine Yilmaz)		
Invited Talks	Fairness and Bias in Recommender Systems QIAU, Iran		2023
	Generazibility of User Fairness in Recommender Systems Mila x Vector Institute, Canada		2023
	Personalized Context-Aware POI Recommendation Universita della Svizzera Italiana, Switzerland		2019
SERVICES	 Organizational Activities Lead-organizing LLM4Eval Workshop at WSDM 2025 Organizing LLMJudge Challange at SIGIR 2024 Co-organizing LLM4Eval Workshop at SIGIR 2024 Co-organizing TREC Deep Learning Track 2023 WITalk: WI Talk Series on NLP and IR, UCL AI Center Program Committee and/or Reviewer ML Venues: ICLR (2025), NeurIPS (2024), AAAI (2023, 2024) NLP Venues: ACL ARR (Feb. 2023 – Present), ACL (2023, 2024), EM IR Venues: ECML/PKDD (2021), WSDM (2021, 2025), SIGIR (2022 - 		g. 2024 l. 2024 v. 2023 o. 2024
Skills	 Programming Languages: Python, Java, C# Tools: PyTorch, HuggingFace, NumPy, SciPy, Pandas, Seaborn, NLTK, Matplotlib, Flask, RESTful API Database Systems: MS SQL Server, MySQL, SQLite, MongoDB Soft Skills: Time Management, Team working, Problem-solving, Fast-Learning Languages: Persian (Native), Tabari (Fluent), English (Proficient), Arabic (Familiar) 		,

Student Registration and Travel Grant for attending MediaEval Benchmark

2019

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