

EMMA JESSICA GERRITSE

Institute for Computing and Information Sciences, Faculty of Science, Radboud University Nijmegen

RESEARCH INTERESTS

Information Retrieval, Entities, Language Models, Fairness and Transparency

EDUCATION

Radboud University Nijmegen *January 2019 - Current*
PhD on Entity-usage in IR Supervisor: prof. dr. ir. A.P. de Vries & dr. ir. F. Hasibi

Radboud University Nijmegen *September 2016 - November 2018*
Master Computing Science; Specialization Data Science
Thesis: An analysis of Network Deconvolution Supervisor: dr. Johannes Textor

Radboud University Nijmegen *September 2012 - July 2016*
Bachelor Computing Science & Bachelor Mathematics Cum Laude & Bene Meritum

Stedelijk Gymnasium Nijmegen *September 2006 - July 2012*
Pre-university education Cum Laude

INVITED TALKS

Entity-aware Transformers for Entity Search, Search Engines Amsterdam, February, 2023

Bias in Information Retrieval, Alice and Eve workshop for women in Computing, November, 2021

Graph-Embedding Empowered Entity Retrieval, Dutch Belgium Information Retrieval Workshop (DIR), December 2020

SCIENTIFIC AWARDS

Future Directions in Information Access best poster award, 2019

KHMW (Royal Holland Society of Sciences and Humanities): Young Talent incentive prize for excellence in the first year of computer science students, received in December 2013

TEACHING AND SUPERVISION

Radboud University Nijmegen *2013 - current*

Teaching assistant for several Computer Science courses on Bachelor and Master level, among which Modelling, Databases, Robotics for High School students, Calculus and Probability, Computability, Information Retrieval, Machine Learning in Practice.

Supervision of four interns for their Research Internship Data science.

OUTREACH AND VOLUNTEERING

Member of the board of Radboud Women in Computer Science 2016 - 2020

Organizing events for female employees and students, going to high schools to give an introductory lesson in Computer Science

Radboud University Nijmegen, Organizing Committee Girls Day 2014, 2015, 2016, 2019

National day for promoting STEM for girls between 8 and 14 years old. Organized by the government, universities and technical industry

INTERNSHIPS AND RESEARCH VISITS

UMass Amherst, Center for Intelligent Information Retrieval Sept 2022 - Dec 2022

Research visit with Dr. Hamed Zamani

Alliander NV Arnhem, Department of Data and Insight Sept 2017 - Jan 2018

Clustering energy user profiles through smart meter data and predicting profiles using metadata

PUBLICATIONS

E.J. Gerritse, F. Hasibi, A.P. de Vries. *"Entity-aware Transformers for Entity Search"* In proceedings of 45th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR '22), 2022.

H. Joko, **E. J. Gerritse**, F. Hasibi, and A. P. de Vries. *"Radboud University at TREC CAsT 2021"*, In TREC 2021 Working Notes, 2021.

E.J. Gerritse, F. Hasibi, A.P. de Vries. *"Bias in Conversational Search: The Double-Edged Sword of the Personalized Knowledge Graph"* In proceedings of ACM SIGIR International Conference on the Theory of Information Retrieval (ICTIR '20), 2020.

L. Holdijk, M. Verbrugge, **E.J. Gerritse**, A.P. de Vries *"Explaining black-box neural ranking models using sentence impact analysis"*, in Proceedings of The 3rd International Workshop on ExplainAble Recommendation and Search (EARS '20), 2020

E.J. Gerritse, A.P. de Vries. *"Effect of Debiasing on Information Retrieval"* in Proceedings of the International Workshop on Algorithmic Bias in Search and Recommendation (BIAS '20), 2020

E.J. Gerritse, F. Hasibi, A.P. de Vries. *"Graph-Embedding Empowered Entity Retrieval"* In Proceedings of the 42nd European Conference on Information Retrieval (ECIR '20), 2020

E.J. Gerritse *"Impact of Debiasing Word Embeddings on Information Retrieval"* in Proceedings of the 9th PhD Symposium on Future Directions in Information Access (FDIA '19), 2019

K. Standvoss, T. Crijns, L. Goerke, D. Janssen, S. Kern, T. van Niedek, J. van Vugt, N. Alfonso Burgos, **E.J. Gerritse**, J. Mol, D. van de Vooren, M. Ghafoorian, T. L. A. van den Heuvel, R. Manniesing *"Cerebral microbleed detection in traumatic brain injury patients using 3D convolutional neural networks."* in Proceedings of SPIE 10575, Medical Imaging 2018: Computer-Aided Diagnosis, 2018