

Gianluca DEMARTINI

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Academic Employment **School of IT and Electrical Engineering**, The University of Queensland, Australia.
Associate Professor in Data Science. Aug 2019 – now.
Senior Lecturer in Data Science. Aug 2017 – Aug 2019.

Information School, The University of Sheffield, UK.
Senior Lecturer in Data Science. Nov 2015 – Jun 2017.
Lecturer (equivalent to Assistant Professor) in Data Science. Aug 2014 – Oct 2015.

eXascale Infolab, University of Fribourg, Switzerland.
Post-doctoral researcher.
May 2011 – July 2014.

L3S Research Center, University of Hannover, Germany.
Junior Researcher.
Mar 2006 – Apr 2011.

Internships and Visits **AMPLab, UC Berkeley**, CA, USA. Summer 2012.
With Michael J. Franklin, Tim Kraska, Beth Trushkowsky on crowdsourced query understanding.

Yahoo! Research, Barcelona, Spain. Summer 2009.
With Hugo Zaragoza and Roi Blanco on Time-aware Entity Ranking in news articles.

Academic Education Leibniz University of Hannover, Germany.
Ph.D. in Computer Science (Dr. rer. nat.)
Supervisors: Wolfgang Nejdl, Arjen P. de Vries.
Title: "From People to Entities: Typed Search in the Enterprise and the Web".
Apr 2006 - Apr 2011.

University of Sheffield, UK.
Post-graduate Certificate in Learning and Teaching, School of Education, Mar 2016.
Fellow of the Higher Education Academy (FHEA), UK.

University of Udine, Italy.
M.Sc. (*cum laude*) in Computer Science
Supervisor: Stefano Mizzaro.
Dec 2003 - Dec 2005.
Summer School participation: "Information Retrieval" (2005).

University of Udine, Italy.
B.Sc. in Computer Science
Supervisor: Alberto Policriti.
Oct 2000 - Dec 2003.

Research Interests Crowdsourcing for Human Computation, Information Retrieval, AI for Public Good.
Awards

- "Methods Recognition" at the CSCW 2021 conference, intended to recognize significant methodological advances or prime examples of good methods implementation.
- **ACM Senior Member**, 2020.
- Selected for the **Google AI for Social Good "Impact Scholars"** program, 2021.
- **Best Short Paper Award** at the ECIR 2020 conference. **Top 0.6%** of all submissions.
- **Honorable Mention Award** at the CSCW 2020 conference. **Top 2%** of all submissions.
- **ACM Senior Member**, 2020.

- **Outstanding Student Paper** in the field of Consumer and Pervasive Health Informatics, American Medical Informatics Association Annual Symposium (AMIA) in 2019 for the paper “Health Cards to Assist Decision Making in Consumer Health Search”.
- The Information Retrieval Distinguished Board Member Award for 2018 and 2019.
- Italian National Scientific Habilitation (Abilitazione Scientifica Nazionale) to Full Professor with validity 2018-2024 in sectors 09/H1 (Computer Engineering) and 01/B1 (Computer Science).
- **Best Paper Award** at the HCOMP 2018 conference. Top 1% of all submissions.
- Ranked in top **7% of EPSRC College members** for peer review activities during the year 2016/17.
- Italian National Scientific Habilitation (Abilitazione Scientifica Nazionale) to Associate Professor with validity 2017-2023 in sectors 09/H1 (Computer Engineering) and 01/B1 (Computer Science).
- **Best Paper Award** at the ECIR 2016 conference. **Top 0.5%** of all submissions.
- Outstanding Early Career **Research Achievement Award**, U. Sheffield Faculty of Social Sciences, 2015.
- Selected for the “**Future Academic Leaders Programme**” at the University of Sheffield, 2015.
- Nominated for a University of Sheffield Faculty Learning and Teaching Award, 2015.
- Nominated for **Best Research Paper** award at the ISWC 2013 conference. **Top 2%** of all submissions.
- Third place at the “**Semantic Web Challenge 2013**” with “B-hist: Entity-Centric Search over Personal Web Browsing History”. Top 18% of all submissions.
- Selected for the 1st **Heidelberg Laureate Forum**, 2013. 10% acceptance rate.
- “Crowdsourcing for Multimedia Ideas Competition” award at **CrowdMM** 2013.
- **Best Demo** Award at the ISWC 2011 conference. **Top 1%** of all submissions.
- 2nd **most Outrageous Idea** Award at the ISWC 2011 conference. **Top 8%** of all submissions.
- **PhD dissertation award** – “Diploma Thesis Award 2011”, Semiramis Research and Service Unit.
- 3rd Best Paper Award at the LA-WEB 2009 conference.
- Selected for the **IBM EMEA Best Student Recognition Event** 2006.
- World Finalist (representing Italy) at **Microsoft** Imagine Cup 2005 Software Eng competition.
- Finalist at the Italian **Microsoft** Imagine Cup 2004, 2005, 2006, 2007.

Leadership Roles

- **PC Chair** for the Short Paper track at the ACM International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR), 2022.
- **General Co-chair** for ACM Int. Conference on Information and Knowledge Management (**CIKM**) 2021.
- ACM SIGIR Awards Chair, 2020-now.
- Co-Chair for the Australasian Document Computing Symposium (ADCS), 2019-2020.
- External Faculty at the Human Computation Institute, 2020-now.
- **EU Project coordinator** of H2020-FashionBrain (2017-2019), leading a research team spread across 6 organizations from UK, DE, CH, NL.
- Co-Chair of the “Crowdsourcing and Human Computation for the Web” track at the Web Conference (**WWW**), 2018.
- Semantic Web Challenges co-Chair at the International Semantic Web Conference (ISWC) 2019.
- External Adviser for Data Science MSc and BSc programs at the University of Chichester, UK, 2017.
- Program Director for “B. Computer Science” 2018-now, U. Queensland.
- Program Director for “MSc Data Science” 2016-2017, U. Sheffield.
- Deputy program coordinator for “MSc Data Science” 2014-2016, U. Sheffield.
- Strategy group member 2015-2017, Information School, U. Sheffield.
- Ethics application reviewer, Information School, 2014-2017, U. Sheffield.

Selected Publications

Crowdsourcing Platforms and Hybrid Human-Machine Systems for Data Analysis

Kevin Roitero, Michael Soprano, Shaoyang Fan, Damiano Spina, Stefano Mizzaro and Gianluca Demartini. Can The Crowd Identify Misinformation Objectively? The Effects of Judgments Scale and Assessor's Bias. In: The 43rd International ACM SIGIR Conference on Research and Development in Information Retrieval (**SIGIR 2020**). Xi'an, China, July 2020.

Alessandro Checco, Jo Bates, and Gianluca Demartini. Adversarial Attacks on Crowdsourcing Quality Control. In: Journal of Artificial Intelligence Research (**JAIR**), 2020.

Lei Han, Kevin Roitero, Ujwal Gadiraju, Cristina Sarasua, Alessandro Checco, Eddy Maddalena, and Gianluca Demartini. The impact of task abandonment in crowdsourcing. In: IEEE Transactions on Knowledge and Data Engineering (**TKDE**), October 2019.

Kevin Roitero, Eddy Maddalena, Gianluca Demartini, and Stefano Mizzaro. On Fine-Grained Relevance Scales. In: 41st Annual ACM SIGIR Conference (**SIGIR 2018**), Ann Harbor, Michigan, USA, July 2018. (Acceptance rate: 21%).

Djellel Eddine Difallah, Michele Catasta, Gianluca Demartini, Panagiotis G. Ipeirotis, and Philippe Cudré-Mauroux. The Dynamics of Micro-Task Crowdsourcing -- The Case of Amazon MTurk. In: 24th International Conference on World Wide Web (**WWW 2015**), Research Track. Firenze, Italy, May 2015. (Acceptance rate: 14.1%)

Ujwal Gadiraju, Ricardo Kawase, Stefan Dietze, and Gianluca Demartini. Understanding Malicious Behaviour in Crowdsourcing Platforms: The Case of Online Surveys. In: Proceedings of the ACM Special Interest Group on Computer Human Interaction (**CHI 2015**). Seoul, South Korea, April 2015. (Acceptance rate: 23%).

Djellel Eddine Difallah, Gianluca Demartini, and Philippe Cudré-Mauroux. Pick-A-Crowd: Tell Me What You Like, and I'll Tell You What to Do. In: 22nd International Conference on World Wide Web (**WWW 2013**), Rio de Janeiro, Brazil, May 2013. (Acceptance rate: 15%).

Gianluca Demartini, Djellel Eddine Difallah, and Philippe Cudré-Mauroux. ZenCrowd: Leveraging Probabilistic Reasoning and Crowdsourcing Techniques for Large-Scale Entity Linking. In: the 21st International Conference on World Wide Web (**WWW 2012**), Lyon, France, April 2012. (Acceptance rate: 12%).

Entity-Centric Information Access

Alberto Tonon, Michele Catasta, Roman Prokofyev, Gianluca Demartini, Karl Aberer, and Philippe Cudré-Mauroux. Contextualized Ranking of Entity Types based on Knowledge Graphs. In: **Journal of Web Semantics**, Elsevier. 2016. (Journal impact factor at publication time: 2.550).

Roman Prokofyev, Gianluca Demartini, and Philippe Cudré-Mauroux. Effective Named Entity Recognition for Idiosyncratic Web Collections. In: 23rd International Conference on World Wide Web (**WWW 2014**). Seoul, South Korea, April 2014. (Acceptance rate: 12.9%).

Alberto Tonon, Michele Catasta, Gianluca Demartini, Philippe Cudré-Mauroux, and Karl Aberer. TRank: Ranking Entity Types Using the Web of Data. In: The 12th International Semantic Web Conference (**ISWC 2013**), Sydney, Australia, October 2013. (Acceptance rate: 21.5%). Nominated for the Best Research Paper Award. (**Top 2%**).

Alberto Tonon, Gianluca Demartini, and Philippe Cudré-Mauroux. Combining Inverted Indices and Structured Search for Ad-hoc Object Retrieval. In: 35th Annual ACM SIGIR Conference (**SIGIR 2012**), Portland, Oregon, USA, August 2012. (Acceptance rate: 20%).

Research Funding

External Research Grants

- **Swiss National Science Foundation Sinergia** "Large-Scale Political Participation: Issue Identification, Deliberation, and Co-creation" (co-I, **2.4M CHF total cost**, 550K AUD funding to UQ), 2022-2026.
- **Google AI Research** "Human-in-the-loop Chimpanzee Identification" (PI, 10K USD), 2021-2022.
- ARC ITTC 2020 "ARC Training Centre on Information Resilience" (co-I and Theme Leader leading the 'Data Curation at Scale' theme - one of the five themes in the centre - **13.8M AUD total cost**, 4.9M AUD ARC contribution), 2020-2025.
- **Facebook Research**, "Crowdsourcing an Online Safety Benchmark for Fake News Identification" (PI, 41K USD funding to UQ), 2019-2020.

- **ARC Discovery Project 2019** “Building crowd sourced data curation processes” (co-I, **900K AUD total cost**, 440K AUD funding to UQ), 2019-2021.
- Industry funding by Neusoft Research of Intelligent Healthcare Technology, Co Ltd “Collaborative Lab of Health Informatics with Neusoft” (Co-I, **1M AUD total cost**, 469K AUD funding to UQ), 2019-2022.
- EU **H2020-ICT-14-2016 (PI, 2.9M EUR total cost**, 1.7M EUR EC Contribution, 420K EUR U Sheffield share) call “Big Data PPP: cross-sectorial and cross-lingual data integration and experimentation”, project “FashionBrain: Understanding Europe’s Fashion Data Universe”, 6 partners, 2017-2019.
- UK **EPSRC First Grant (PI, 120K GBP total cost**, 100K GBP EPSRC Contribution), project “BetterCrowd: Human Computation for Big Data”, individual grant, 2016-2017.
- UK **AHRC Collaborative Doctoral Partnership** (Co-I, 70K GBP) “Investigating entity-centric methods for information exploration and discovery in big digital archives”, 2015-2018.
- **Amazon AWS in Education Grants** (PI, 2’500 USD), 2015.

Internal Research Grants

- U Queensland, UQ Cyber Security Transdisciplinary Research Seed Funding (PI, 73K AUD), “A Data-Driven Analysis of Disinformation in Australian Social Media Campaigning”, 2021.
- U Queensland, UQ Early Career Researcher grant (PI, 22K AUD), “Artificial Intelligence with Humans in the Loop”, 2019.
- U Queensland, School of ITEE (PI, 30K AUD), “Virtual reality devices for the Data Science Human Computation Laboratory”, 2018.
- U Queensland, Faculty new staff start-up grant (PI, 50K AUD), “Understanding the Dynamics of a Crowdsourced Knowledge Graph”, 2017.
- U Sheffield iSchool Internal Seed Grant (PI, 700 GBP) “OpenTurk: A Task Recommender System for Crowd Workers”, 2016.
- U Sheffield iSchool Internal Seed Grant (Co-I, 1971 GBP) “Cultures of Data Science Practice”, 2016.
- Sheffield Methods Institute Fund (PI, 720 GBP) “Crowdsourcing Social Science Data Analysis”, 2015.
- U Sheffield iSchool Internal Seed Grant (PI, 2’300 GBP) “Crowdsourcing for Big Data”, 2015.

External Travel Grants

- Universities Australia – DAAD Joint Research Co-operation Scheme “Human-in-the-loop Natural Language Processing in GLAM” (**PI, 24’000 AUD**), 2022-2023.
- Uni. Vienna non-EU teaching mobility, 2022.
- ESF ELIAS Scientific meeting (**PI, 7’500 EUR**) Dagstuhl meeting titled “Crowdsourcing Research - Transcending Disciplinary Boundaries”, 2016.
- ESF ELIAS STSM Travel grant for a research visit at U Udine, Italy, 2015.
- MUMIA STSM Travel grant for a research visit at CWI, Amsterdam, The Netherlands, 2013.
- International Short Visits grant from the Swiss National Science Foundation (SNSF), 2012.
- ACM Student Travel grant to attend SIGIR 2010.

Community activities

Journal Editorial Board

- **Co-Editor in Chief** for the Human Computation Journal, 2018-2021.
- **Area Editor** for the Journal of **Web Semantics**, Elsevier, 2016-now.
- Editorial Board Member for the **Information Retrieval Journal**, Springer, 2017-2021.
- Editorial Board Member for the Journal of **Web Semantics**, Elsevier, 2015-2016.
- Special Issue on eDemocracy & eGovernment (SIEDEG) of the IEEE Transactions on Emerging Topics in Computing, 2016-2017.

Senior Roles in Program Committees

- Short Paper track **PC Chair**, the ACM International ACM SIGIR Conference on Research and Development in Information Retrieval (**SIGIR**), 2022.
- Senior PC member, AAAI Conference on Artificial Intelligence (**AAAI**), 2021.
- Senior PC member, the ACM International ACM SIGIR Conference on Research and Development in Information Retrieval (**SIGIR**), 2020-2022.
- Senior PC member, the ACM International Conference on Web Search and Data Mining (**WSDM**), 2020, 2022.

- Senior PC member, the “Crowdsourcing and Human Computation” research track at the Web Conference (**WWW**), 2020.
- Chair for the “Web and the Society” track at the ACM **Hypertext** conference, 2020.
- Senior PC member, the International Semantic Web Conference (**ISWC**), 2019-2020.
- Co-Chair of the “Crowdsourcing and Human Computation for the Web” track at the Web Conference (**WWW**), 2018.
- Senior PC member, AAAI Conference on Human Computation and Crowdsourcing (**HCOMP**) 2016, 2020
- Senior PC member, the International Conference on Web Engineering (**ICWE**), 2016-2017.
- Senior PC member, the ACM International Conference on Information and Knowledge Management (**CIKM**), 2015-2018, 2020.

Program Committee Member

- Extended Semantic Web Conference (ESWC) PhD Symposium, 2021.
- **AAAI** Conference on Artificial Intelligence, 2020.
- The IEEE International Conference on Distributed Computing Systems (ICDCS), 2020.
- AAAI workshop on Knowledge Discovery from Unstructured Data in Financial Services (KDF), 2020-22.
- Semantics & Knowledge research track at the Web Conference (**WWW**), 2020.
- International Workshop on Knowledge Graphs for Online Discourse (KnOD) at ESWC, 2020.
- IEEE Workshop on Human-in-the-Loop Methods and Future of Work in BigData (HMDData) at IEEE Bigdata 2020-2021.
- ACM Conference on Fairness, Accountability, and Transparency (FAT*), 2019.
- Workshop on Fairness, Accountability, Confidentiality, Transparency, and Safety in Information Retrieval at SIGIR, 2019.
- Australasian Database Conference (ADC), 2019-2020.
- International Workshop on Intelligent User Interfaces for Algorithmic Transparency in Emerging Technologies at ACM IUI, 2019.
- Workshop on Quality of Open Data (QOD) at BIS, 2019.
- The IEEE International Conference on Data Mining (**ICDM**), 2018.
- International Conference on Database Systems for Advanced Applications (DASFAA), 2018.
- Social Informatics conference (SocInfo), 2018, 2020.
- ACM International Web Search and Data Mining (WSDM) Conference, Demo track, 2018.
- ACM International Web Search and Data Mining (WSDM) Conference, Doctoral Consortium, 2018.
- AAAI Conference on Human Computation and Crowdsourcing (**HCOMP**), 2018-2021.
- Research track of the International Semantic Web Conference (**ISWC**), 2012, 2017.
- Crowdsourcing research track at the World Wide Web Conference (**WWW**), 2017-2020.
- ACM International Conf. on Research and Development in Information Retrieval (**SIGIR**), 2012-2020.
- ACM SIGKDD Conference on Knowledge Discovery and Data Mining (**KDD**), 2017-2018.
- Australasian Document Computing Symposium (ADCS), 2017-2018.
- Poster track at the World Wide Web Conference (**WWW**), 2017-2018.
- International ACM Web Science Conference (**WebSci**), Poster Track, 2017, 2019.
- iConference, 2017-2018.
- Workshop on Crowdsourcing and Multiagent Systems at the International Conference on Autonomous Agent and Multiagent Systems (ICAAMAS), 2017.
- Workshop on Data Science for Intelligent Decision Support (DS4IDS) at the 5th International Conference on Future Internet of Things and Cloud (FiCloud), 2017.
- Workshop on Knowledge Graphs and Semantics for Text Retrieval and Analysis (KG4IR) at SIGIR 2017.
- International Joint Conference on Artificial Intelligence (**IJCAI**), 2013, 2016, 2019, 2020, 2022.
- The International AAAI Conference on Weblogs and Social Media (**ICWSM**) 2014, 2017-2018.
- Content Analysis research track at the World Wide Web Conference (**WWW**), 2016.
- Doctoral Consortium at the International Semantic Web Conference (**ISWC**), 2016-2019.
- Resources Track at the International Semantic Web Conference (**ISWC**), 2016.
- Special Session on Collective Intelligence, Crowd Sourcing, and Collaboration (CICS) at the International Conference on Collaboration Technologies and Systems (CTS), 2016.
- Russian Summer School in Information Retrieval (RussIR), 2016.
- Conference on Artificial Intelligence and Natural Language (AINL), 2016-2017.
- IEEE Conference on Business Informatics (CBI), 2016.
- Italian Conference on Computational Linguistics (CLIC-IT), 2016.

- International Workshop on Benchmarks for Ubiquitous Crowdsourcing: Metrics, Methodologies, and Datasets (Crowdbench) at IEEE PERCCOM 2016.
- Workshop on Data Science for Intelligent Decision Support (DS4IDS) at the International Conference on Computational Science and Applications (ICCSA), 2016.
- Workshop on LINKed Education at ISWC, 2015.
- Empirical Studies and Experiments track of the International Semantic Web Conference (**ISWC**), 2015.
- Workshop on Exploiting Semantic Annotations in Information Retrieval (ESAIR) at CIKM, 2015-2016.
- ACM SIGIR International Conference on the Theory of Information Retrieval (**ICTIR**), 2015-2017.
- International Symposium on String Processing and Information Retrieval (**SPIRE**), 2015.
- Symposium on Data-Driven Process Discovery and Analysis (SIMPDA), 2015.
- International Conference on Knowledge Discovery and Information Retrieval (KDIR), 2015.
- International Workshop on the Theory and Practice of Social Machines (SOCM) at WWW, 2015-2016.
- Social Web Applications track at the International Conference on Web Engineering (**ICWE**) 2015.
- Social networks and graph analysis track at the World Wide Web Conference (**WWW**), 2013-2014.
- Replication, Benchmark and Data Track of the International Semantic Web Conference (**ISWC**), 2014.
- Extended Semantic Web Conference (**ESWC**), 2013-2016, 2018-2021.
- ACM International Conference on Information and Knowledge Management (**CIKM**), 2011,2014.
- International Workshop on Social Media in Crowdsourcing and Human Computation at SocInfo, 2014.
- International Conference on Advances in Semantic Processing (SEMAPRO), 2014-2016.
- “Crowdsourcing” Session at the Int. Conf. on Communications and Electronics (ICCE), 2014-2015.
- “Computational Science and Computational Intelligence” Session at the Int. Conf. on Advanced Technologies for Communications (ATC), 2014.
- CIKM 2012 City Data Management 2012 Workshop.
- SIGIR 2012 1st Joint International Workshop on Entity-oriented and Semantic Search, 2012.
- SIGIR Workshop on Time-aware Information Access (TAIA), 2012-2015.
- Artificial Intelligence meets the Web of Data Workshop at ECAI 2012 and ESWC 2013.
- International Workshop on Learning and Education with the Web of Data at WWW (LILE), 2012-2016.
- European Conference on Information Retrieval (**ECIR**), 2012-2014.
- First International Workshop on Entity-Oriented Search (EOS) at SIGIR, 2011.
- Posters and Demonstrations Track of the 9th Intern. Semantic Web Conference (ISWC), 2010.
- Personal Information Management (PIM) Workshop 2009, 2012.

Organization Roles

- Co-organizer of the ‘Workshop On Bias in Automatic Knowledge Graph Construction’ at the Conference on Automated Knowledge Base Construction (AKBC), 2020.
- Co-organizer of the ACM International Conference on Information and Knowledge Management (CIKM) 2020 Doctoral Consortium.
- Metadata Chair for the International Semantic Web Conference (**ISWC**), 2020.
- Co-organizer of Semantic Web Challenges at the International Semantic Web Conference (**ISWC**), 2019.
- Co-organizer of the ‘International Workshop On Job Knowledge Discovery on the Web & Social Media’ (JOBNOW) at **ACM HyperText**, 2019.
- Co-organizer of the ‘Augmenting Intelligence with Bias-aware Humans-in-the-Loop’ (HumBL2018) Workshop at **The Web Conference**, 2019.
- Co-organizer of the ‘CrowdBias: Disentangling the Relation Between Crowdsourcing and Bias Management’ (CrowdBias2018) Workshop at **HCOMP**, 2018.
- Publicity co-chair for the AAAI Conference on Human Computation and Crowdsourcing (HCOMP), 2018.
- Co-organizer of the ‘Augmenting Intelligence with Humans-in-the-Loop’ (HumL2018) Workshop at **WWW** and **ISWC**, 2018.
- Student Coordinator for the International Semantic Web Conference (**ISWC**), 2017.
- External Liaison Chair at the 2017 Workshop on Hybrid Human-Machine Computing (HHMC 2017).
- Co-organizer of the workshop ‘Weaving Relations of Trust in Crowd Work: Transparency and Reputation across Platforms’ at WebScience 2016.
- Human Computation and Crowdsourcing Track at the Extended Semantic Web Conference (**ESWC** 2015)
- Member of the Local Organization team for CLEF 2014, Sheffield.
- Entity Ranking Track at the 9th Initiative for the Evaluation of XML Retrieval (INEX 2009).
- Entity Ranking Track at the 8th Initiative for the Evaluation of XML Retrieval (INEX 2008).

Best Paper Award Selection Committee Member

- International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR) Best short paper award, 2020.
- ACM International Web Search and Data Mining (WSDM) Conference, 2019.
- ACM Conference on Fairness, Accountability, and Transparency (ACM FAT*), 2019.

Reviewer for Journals

- Scientific Reports, Springer Nature, 2021.
- IEEE Access, 2020.
- EPJ Data Science, 2018.
- Knowledge and Information Systems (KAIS), 2018.
- IEEE Transactions on Knowledge and Data Engineering (TKDE), 2012, 2017-2018.
- ACM Transactions on Internet Technology (TOIT), 2017.
- Foundations and Trends in Information Retrieval (FnTIR), 2017.
- Computer Supported Cooperative Work Journal (CSCWJ), Springer, 2017.
- Journal of Information Science (JIS), 2017.
- Engineering Applications of Artificial Intelligence, Elsevier, 2017.
- Communications of the ACM, 2016.
- The Computer Journal, Oxford University Press, 2016.
- Online Information Review, Emerald, 2016.
- IEEE Transactions on Services Computing (TSC), 2015-2016.
- Information Processing & Management (IPM), 2015, 2019.
- Information Research, 2015.
- Information Systems, Elsevier, 2015, 2018.
- Knowledge-Based Systems, Elsevier, 2015.
- Engineering Applications of Artificial Intelligence, Elsevier, 2015.
- ACM TIST Special Issue on Crowd in Intelligent Systems, 2015.
- Semantic Web journal (SWJ) Special Issue on Human Computation and Crowdsourcing (HC&C), 2015
- Semantic Web journal (SWJ) Special Issue on Ontology and Linked Data Matching, 2014.
- Journal of Machine Learning Research (JMLR), 2014.
- International Journal of Human-Computer Studies (IJHCS), 2014, 2016.
- ACM Transactions on Information Systems (TOIS), 2014, 2017.
- Special Issue of the Journal of Distributed and Parallel Databases (DAPD) on "Databases and Crowdsourcing", 2014.
- Journal of Computer Science and Technology, Springer, 2014.
- IEEE Transactions on Neural Networks and Learning Systems (TNNLS), 2014-2016.
- ACM Transactions on the Web (TWEB), 2013-2016.
- Special Issue of the Journal of **Web Semantics** on "Semantic Search", Elsevier, 2013.
- Special Issue of the Journal of **Web Semantics** on "Semantic Web Challenge 2013", Elsevier, 2014.
- Journal of Data and Information Quality (JDIQ), 2013, 2015.
- Majlesi Journal of Electrical Engineering (MJEE), 2013.
- Springer book series: "Theory and Applications of Natural Language Processing", 2012.
- **Information Retrieval**, Springer, 2012, 2015-2017.
- Interactive Learning Environments, Routledge, 2012.
- Journal of Web Engineering (JWE), Rinton Press, 2012.
- IEEE Computational Intelligence Magazine, 2011.
- Knowledge and Information Systems Journal (KAIS), Springer, 2011.
- Artificial Intelligence Journal (AIJ), Elsevier, 2010-2011.
- Journal of the American Society for Information Science and Technology (JASIST), 2010, 2016.
- Journal of Network and Computer Applications, Elsevier, 2010.
- International Journal of Web Information Systems, Emerald, 2009.

External Reviewer for Conferences

- ACM CHI, 2020.
- ACM CSCW, 2019.
- ACM UIST, 2019.
- ACM CHI 2019 Late Breaking Work track, 2019.

- ACM CHI 2015 alt.chi track, 2015.
- International Conference on Information Systems (ICIS) 2014, IC Design Science Track.
- Research track of the 12th International Semantic Web Conference ISWC 2013.
- AAAI Conference on Artificial Intelligence (AAAI-13).
- 1st International Workshop on “Crowdsourcing the Semantic Web” at ISWC 2013.
- Demo Track of the 38th International Conference on Very Large Databases VLDB 2012.
- Semantic Web Track of the 21st International World Wide Web Conference WWW 2012.
- Research Track of International Conference on Extending Database Technology EDBT 2012, 2013.
- In-Use Track of the 10th International Semantic Web Conference ISWC 2011.
- Poster Track of the International World Wide Web Conference WWW 2008, 2013.
- Poster Track of the 31st International ACM SIGIR 2008 Conference.

Session Chairing at Conferences

- “Bias and Counterfactual Learning 2” Session at SIGIR 2021.
- “Entities and Relations” Session at CIKM 2020.
- “Advanced methodology and measurement” Session at WSDM 2020.
- “Learning to be Efficient” Session at HCOMP 2016.
- “Crowdsourcing & Web Science” Session at ESWC 2015.
- “Crowdsourcing 1” Session at WWW2014.
- “Social and Collaborative Semantics” Session at ISWC 2012.

Service for Funding Bodies (Reviewer for funding applications)

- Australian Research Council (ARC), 2018-2021.
- Czech Science Foundation, 2020-2021.
- H2020 SoBigData project funding review committee, 2019.
- UK Engineering and Physical Sciences Research Council **EPSRC Full College member**, 2017-now.
- Netherlands Organisation for Scientific Research (NWO), 2017-2018.
- UK Engineering and Physical Sciences Research Council EPSRC Associate College member, 2016-2017.
- Commonwealth Scholarship Commission (CSC), 2017.
- UK Science and Technology Facilities Council (STFC), 2017.
- UK Engineering and Physical Sciences Research Council (EPSRC), 2014-2015.
- UK Arts & Humanities Research Council (AHRC), 2014.
- The German Academic Exchange Service (DAAD), 2015.

Invited Talks & Tutorials (Selected)

Invited Talks

- “Bias in Human-In-The-Loop Artificial Intelligence”, Invited talk at the Crowd Science workshop at **NeurIPS 2020**.
- “Knowledge Graph Quality Management” – Invited Keynote at the Semantic Web solutions for large-scale biomedical data analytics (SeWeBMeDA-2019) Workshop at ISWC 2019.
- “Content moderators: the gatekeepers of social media” - **TEDxUQ**, Brisbane, Australia.
- “Human Factors and Bias in Crowdsourced Information Retrieval Evaluation”, University of Zurich, Switzerland, 2018.
- “Human Factors and Bias in Crowdsourced Information Retrieval Evaluation”, University of Fribourg, Switzerland, 2018.
- “Human Computation for Entity-Centric Information Access”, Università della Svizzera Italiana (USI), Lugano, Switzerland, 2017.
- “The Power of Big Data” - ACM Distinguished Speaker talk as **keynote** at the Second International “Digital Transformation & Global Society” Conference (DTGS’17), St Petersburg, 2017.
- “Crowdsourcing for Data Management”, invited talk at the PhD School of the Australasian Database Conference (ADC) 2017, Brisbane, 2017.
- “Human Factors in Crowdsourcing” – Research Seminar at the University of Fribourg, 2017.
- “The Power of Big Data” - ACM Distinguished Speaker talk at Accenture Latvia, 2017.
- “Human Computation for Entity-centric Information Access” – Research Seminar at U Glasgow, 2016.
- “Human Computation for Entity-centric Information Access” – Research Seminar at U Leeds, 2016.
- “Introduction to Crowdsourcing” and “Quality at Scale” – Invited talks at **Facebook**, London, UK, 2016.

- “Human Computation for Entity-centric Information Access” – Research Seminar at U Twente, 2016.
- “Human Computation for Entity-Centric Information Access” – Research Seminar at UCL, 2016.
- “Crowdsourcing for Entity-centric Information Access” – **Keynote** at AINL-ISMW, St Petersburg, 2015.
- “Leveraging n-gram statistics for grammatical correction and entity recognition” – Invited talk at **Facebook**, London, UK, 2015.
- “Crowdsourcing for Entity-centric Information Access” – **Keynote** at KDWeb, Cagliari, Italy, 2015.
- “The randomForest package” - Sheffield R Users Group, 2015.
- “MSc Data Science at the University of Sheffield” - Open Data Science Meetup, U Sheffield, 2014.
- “Entity-Centric Information Access” – NLP Group research seminar, U Sheffield, 2014.
- “Human Computation: Machines are not enough” – Ignite Academy, U Sheffield, 2014.
- “Crowdsourcing is for the tail” – **Dagstuhl Seminar** 14282 - Crowdsourcing and the Semantic Web, 2014.
- “Human Computation for Big Data” – CUSO Seminar on Big Data, Fribourg, 2014.
- “Entities, Graphs, and Crowdsourcing for better Web Search” – UvA, Amsterdam, The Netherlands, 2013.
- “Workshop on Crowd-Sourcing” - Heidelberg Laureate Forum, Heidelberg, Germany, 2013.
- “Next-Generation Micro-task Crowdsourcing Platforms” - **Dagstuhl Seminar** 13361 on Crowdsourcing: From Theory to Practice and Long-Term Perspectives, 2013.
- “Entities, Graphs, and Crowdsourcing for better Web Search” – USI, Lugano, Switzerland, 2013.
- “Getting Semantics from the Crowd” - **Dagstuhl Seminar** 12171 on Semantic Data Management, 2012.
- “Current Approaches to Search Result Diversification” - Search Computing Workshop, Milano, Italy, 2010.

Tutorials

- Tracking User Behaviours: Laboratory-Based and In-The-Wild User Studies, Tutorial at **DASFAA** 2019, Apr 2019, Chiang Mai, Thailand.
- “Crowdsourcing for Data Management” - course at the PhD School of the Australasian Database Conference (ADC) 2017, Brisbane, Australia.
- Course (external consultancy) on Data Mining for Lhasa Limited, May 2017, Leeds, UK.
- “Using Crowdsourcing Effectively for Social Media Research” - Tutorial at **ICWSM** 2016, Cologne, Germany with Ujwal Gadiraju, Djellel E. Difallah, and Michele Catasta.
- “It’s Getting Crowded! How to Use Crowdsourcing Effectively for Web Science Research” - Tutorial at **Web Science** 2016, Hannover, Germany with Ujwal Gadiraju, Djellel E. Difallah, and Michele Catasta.
- “Crowdsourcing for Data Processing and Search” - Half-day tutorial at Search Solutions 2015, London, UK.
- “Improving the quality of crowdsourced annotations” tutorial at IEEE AINL-ISMW 2015, St.Petersburg, Russia, 2015.
- “Leveraging **Knowledge Graphs** for Web Search” - RuSSIR 2015 course (8 hours), St Petersburg, 2015.
- “Micro-task Crowdsourcing” - PhD course (14 hours) at U Udine, 2015.
- Full-day tutorial “Microtask crowdsourcing to solve Semantic Web problems” at **ISWC** 2013 with Elena Simperl and Maribel Acosta. (<https://sites.google.com/site/microtasktutorial/>).
- Full-day tutorial “Crowdsourcing for the Semantic Web” at **ESWC** 2013 with Elena Simperl and Maribel Acosta. (<https://sites.google.com/site/crowdsourcingtutorial/>).
- Full-day tutorial “From Expert Finding to **Entity Search** on the Web” at **ECIR** 2012 with Peter Mika, Thanh Tran, and Arjen P. de Vries. (<http://diuf.unifr.ch/main/xi/EntitySearchTutorial/>).

Public Engagement Activities

- “The Gig Economy: challenges and opportunities”, Sheffield Festival of Science and Engineering, British Science Week, March 2017.
- “The power of Big Data”, Café Scientifique, Sheffield, 2015.
- “What is Big Data and why should we care?” talk for Mobile University, Sheffield, 2015.
Invited talk at the University of Sheffield Ignite Academy titled “Human Computation: Machines are not enough” for the Festival of the Mind 2014 (<http://festivalofthemind.group.shef.ac.uk>).

Teaching

- Course leader of “**DATA2001 Foundations of Data Science**” 2021 for B Comp Sc, U. Queensland.
- Course leader of “**DATA7201 Data Analytics at Scale**” 2018-21 for M Data Science, U. Queensland.
- Course leader of “**INFS3200 Advanced Database Systems**” 2018-2019, U. Queensland.
- Course leader of “**Big Data Analytics**” 2016/2017 for MSc Data Science, U. Sheffield.
- Course leader of “**Data Mining and Visualisation**” 2016/2017 for MSc Data Science, U. Sheffield.
- Teacher for Course “**Introduction to Data Science**” 2016/2017 for MSc Data Science, U. Sheffield.

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- Teacher for Course “**Introduction to Data Science**” 2014/2015 for MSc Data Science, U. Sheffield.
- Leader for Course “**Social Computing**” 2013/2014 for the MSc in Computer Science, U. of Fribourg.
- Leader for Course “**Social Computing**” 2012/2013 for the MSc in Computer Science, U. of Fribourg.
- Teacher for Course “**Social Computing**” 2011/2012 for the MSc in Computer Science, U. of Fribourg.
- Guest teacher for Course “**Web Science**” 2010/2011 at the Leibniz University of Hannover.
- TA for “Artificial Intelligence II” 2008/2009 at the Leibniz University of Hannover.

Internal Service

- Program Group Convenor for Computer Science and Data Science degrees at the School of ITEE, University of Queensland, 2019-now.
- Credit assessment for BCompSci at the School of ITEE, University of Queensland 2018-now.
- Student Advisor for BInfTech at the School of ITEE, University of Queensland 2017-2018.
- Program Convener for “**B. Computer Science**” 2018-now, U. Queensland.
- Program Coordinator for “**MSc Data Science**” 2016-2017, U. Sheffield.
- Member of the Strategy Committee of the Information School, University of Sheffield 2015-2017.
- Member of the Teaching Committee of the Information School, University of Sheffield 2014-2017.
- Member of the ethics review board of the Information School, University of Sheffield 2014-2017.

Ph.D. Supervision

Ongoing.

- Linh Le, University of Queensland, 2020-now. (Main supervisor)
 - Shaoyang Fan, University of Queensland, 2019-now. (Main supervisor)
 - Shaochen Yu, University of Queensland, 2020-now. (Secondary supervisor)
 - Jiechen Xu, University of Queensland, 2020-now. (Secondary supervisor)
 - Hatim Lahza, University of Queensland, 2020-now. (Secondary supervisor)
 - Tianwa Chen, University of Queensland, 2019-now. (Secondary supervisor)
 - Kexuan Xin, University of Queensland, 2019-now. (Secondary supervisor)
- ##### *Completed.*
- Lei Han, University of Queensland, 2018-2021. (Main supervisor)
 - Jimmy, University of Queensland, 2019. (Secondary supervisor)
 - Humaira Ehsan, University of Queensland, 2019. (Secondary supervisor)
 - Rehab Qarout, University of Sheffield, 2018. (Secondary supervisor)
 - Mengdie Zhuang, University of Sheffield, 2018. (Secondary supervisor); now faculty member at U. Sheffield, UK.
 - Wasim Ahmed, “Using Twitter data to provide qualitative insights into pandemics and epidemics”, University of Sheffield, 2018. (Secondary supervisor); now faculty member at U. Newcastle, UK.

External Examiner for Ph.D.

- Markus Zlabinger, “Efficient and Effective Manual Corpus Annotation”, TU Wien, Austria, July 2021.
- Danula Hettiachchi, “Task Assignment using Worker Cognitive Ability and Context to Improve Data Quality in Crowdsourcing”, University of Melbourne, Australia, May 2021.
- Alfian Farizki Wicaksono, “Modelling Search and Session Effectiveness”, University of Melbourne, Australia, December 2020.
- Ziyang Yang, “Improving the Reliability and Robustness of Information Retrieval Evaluation”, University of Melbourne, Australia, November 2019.
- Yuan Jin, “Modelling Techniques and Inference Procedures for Improving Quality Control in Crowdsourcing Applications”, Monash University, Australia, August 2018.
- Dilesha Seneviratne, “Patent Link Discovery”, Queensland University of Technology, Australia, July 2018.
- Evi Yulianti, “Answer-biased Summarization”, RMIT, Australia, May 2018.
- Panagiotis Mavridis, “Using Hierarchical Skills for Optimized Task Selection in Crowdsourcing”, Rennes, France, November 2017.
- Ujwal Gadiraju, “It’s Getting Crowded! Improving the Effectiveness of Microtask Crowdsourcing”, Leibniz Universität Hannover, Germany, October 2017.

- Kinda El-Maarry, “Socially-aware Quality Control for Crowdsourcing”, TU Braunschweig, Germany October 2017.
- Alberto Tonon, “Leveraging Entity Types and Properties for Knowledge Graph Exploitation”, U Fribourg, Switzerland, 2017.
- S.M. Khelghati, “Deep Web Content Monitoring”, U Twente, Netherlands, 2016.
- Michele Catasta, “Memory-based Information Systems”, EPFL, Switzerland, 2015.
- Djellel E. Difallah, “Quality of Service in Crowd-Powered Systems”, U Fribourg, Switzerland, 2015.

M.Sc. Thesis Supervision

- Supervisor of 50+ undergraduate and post-graduate dissertations at the University of Queensland, Australia during 2018-2022.
- Supervisor of 11 MSc dissertations (8 in Data Science, 2 in Information Management, 1 in Information Systems Management) at the University of Sheffield, UK during 2015/2016.
- Supervisor of 10 MSc dissertations (6 in Data Science, 2 in Information Management, 1 in Information Systems, 1 in Information Systems Management) at the University of Sheffield, UK during 2014/2015.
- Supervisor of 7 MSc Computer Science dissertations at the University of Fribourg, Switzerland during 2011-2014.

EU Project Participation

- EU H2020 FashionBrain project (<http://www.fashionbrain-project.eu>), project coordinator.
- EU FP7 Arcomem project (<http://www.arcomem.eu>), WP leader.
- EU FP7 LivingKnowledge project (<http://livingknowledge.europarchive.org/>), WP leader.
- EU FP7 Okkam project (<http://fp7.okkam.org>): “Enabling the Web of Entities”, WP leader.
- EU FP6 Nepomuk project (<http://nepomuk.semanticdesktop.org>): “The Social Semantic Desktop”. WP leader.