Ingo Frommholz

PhD (Dr. rer. nat.), Diplom-Inform., FBCS, FHEA

Current Position

Reader (~Associate Professor) in Data Science at the University of Wolverhampton, UK Adjunct Professor (Lehrbeauftragter) at the Bern University of Applied Sciences, Switzerland

Summary

- o Interested in Deep Learning, AI and NLP for human-centred Information Retrieval
- o Founder and head of the Data Science and Al Research group at the University of Wolverhampton. Deputy director Digital Innovations and Service Centre (DISC) at the University of Wolverhampton
- o PhD in Computer Science (Dr. rer. nat., summa cum laude), University of Duisburg-Essen, Germany
- o Funding/PI: EU Horizon Europe MSCA Staff Exchange project OMINO on Information Overload (2023-2027, UKRI guarantee funding, total 1,550,200.00€, own part 253,000€); EU H2020 ETN QUARTZ on quantum mechanics and information retrieval (2016-2020, total 3,461,495.04€, own part 546,757.76€); Internally funded RIGHT project on deep learning for digital humanities (since 2023, GBP 612,621). PI of further smaller research and knowledge transfer projects.
- o Published more than 100 refereed and unrefereed articles, preprints, reports, proceedings, books and book sections
- Treasurer and Steering Committee Member, The Chartered Institute for IT (BCS) Information Retrieval Specialist Group (BCS-IRSG)
- o Senior managing editor of the International Journal on Digital Libraries (Springer)
- o General Chair ACM CIKM 2023, Birmingham (Core-A-ranked conference with 750 delegates)
- o Chair and (senior) programme committee member of several world-leading conferences and journals in Information Retrieval, Al and Digital Libraries
- o Organiser of several international workshops (e.g., BIR, BIRNDL, BIRDS, BCS Search Solutions, FDIA) and schools (ESSIR, ASIRF)
- o Course and programme co-ordinator for Computer Science, Data Science and Artificial Intelligence undergraduate and postgraduate programmes; module co-ordinator and lecturer in the UK, Germany, Switzerland, Oman and Jordan of several Computer Science topics at undergraduate and postgraduate level, such as: Information Retrieval, Machine Learning and Artificial Intelligence, Data Mining, Data Science, Cybermetrics and Statistics, Data Engineering, Databases and Data Modelling, Programming and Data Structures, Distributed Computing
- Supervised 8 PhD students to successful completion; examiner for 11 PhD candidates in the UK, Denmark, Finland, The Netherlands, Italy and Germany
- o BCS Fellow (FBCS), ACM Member (SIGIR), Advance HE Fellow (FHEA)
- o External examiner, University of Strathclyde, Glasgow, UK and University of Sheffield, UK

Education

- 2008 PhD (Dr. rer. nat.) in Computer Science, University of Duisburg-Essen, Duisburg, Germany
- 2001 Diplom-Informatiker (MSc Computer Science equivalent), University of Dortmund, Germany
- 2012 Postgraduate Certificate in Academic Practice (PgCAP), University of Bedfordshire, Luton, UK

Professional Experience

- 12/2020– Reader (Associate Professor equivalent) in Data Science, School of Engineering, Computing and Present Mathematical Sciences, University of Wolverhampton, UK
- 02/2023- **Adjunct Professor (Lehrbeauftragter)**, School of Engineering and Computer Science, Bern University Present of Applied Sciences, Biel/Bienne, Switzerland
- 02/2011– **Lecturer/Senior Lecturer**, School of Computer Science and Technology, University of Bedfordshire, Lu-11/2020 ton, UK

- 2012-2018 Search and Data Science Consultant, Self Employed, London, UK
 - 11/2008- Postdoctoral Research Associate, Information Retrieval Group, School of Computing Science, University
 - 01/2011 of Glasgow, Glasgow, Scotland
 - 10/2004- Research Assistant, Information Systems Group, Faculty of Engineering Sciences, University of Duisburg-
 - 10/2008 Essen, Duisburg, Germany
 - 3/2006— **Visiting researcher**, Information Management Systems Research Group, University of Padua, Italy
 - 4/2006
 - 3/2001- Research Assistant, Fraunhofer Integrated Publication and Information Systems Institute (IPSI), Darm-
 - 9/2004 stadt, Germany
 - 11/1994— Software Developer, Several companies: adesso GmbH, o.tel.o GmbH, Lion Ges. für Systementwicklung
 - 2/2001 mbH, Bochum, Düsseldorf, Dortmund, Germany

Selected Research and Industry Grants

Research Grants

- 2023-2026 OMINO, University of Wolverhampton, UK
 - EU Horizon Europe MSCA Staff Exchange project on tackling Information Overload (total worth GBP 1,342,174, own part GBP 218,036). Pl.
- 2023–2025 **RIGHT Responsible Digital Humanities Lab**, *University of Wolverhampton*, UK Internally funded project for PhD students to work on deep learning for digital humanities (worth GBP 612,621). Pl.
- 2023–2025 LASER, *University of Wolverhampton*, UK

 Internally funded PhD project on large language models in information retrieval (worth GBP 39,000). Pl.
- 2016–2020 **QUARTZ**, University of Bedfordshire, Luton, UK
 - EU H2020 Marie Curie ITN European Training Network on quantum-based information access and retrieval (worth GBP 2,996,988, own part GBP 473,387). Pl.
- 2012–2013 Rising Star, University of Bedfordshire, Luton, UK
 - Internal Research Investment Rising Star Funding on Query Session Processing for Information Seeking and Searching (GBP 6,000). PI
- 2010–2011 QONTEXT, University of Glasgow, Glasgow, UK
 - EU Marie Curie FP7-IRSES project on information retrieval and quantum theory. Contributed to the successful research proposal.
- 2004–2006 CLASSIX, University of Duisburg-Essen, Duisburg, Germany
 - German Research Foundation (DFG) project on classification and intelligent search on information in XML. Pl.

KTP and Industry Grants

- 2016-2019 Drax Technology Ltd, University of Bedfordshire, Luton, UK
 - Innovate UK Knowledge Transfer Partnership with Drax Technology on Internet of Things, machine learning and intelligent fire alarms (worth GBP 134,752). Lead academic and PI.
- 2012–2018 NotActivelyLooking.com
 - Private consultancy project on the design and implementation of a search engine for executives (in collaboration with industry partners). PI and main software developer.
- 2016–2017 Wardown Park Talking Objects, University of Bedfordshire, Luton, UK
 - Digital Humanities KTP project combining augmented reality and conversational information retrieval (Luton Cultural Services Trust, GBP 18,971). Pl.
 - 2015 EduVocation, University of Bedfordshire, Luton, UK
 - Teacher recruitment site and information system based on linked open data (UK Innovation Voucher, GBP 5,000). PI.
- 2013–2015 Luton Culture World War I project, University of Bedfordshire, Luton, UK
 - Digital Museum and Linked Data project on World War I in conjunction with Luton Museum (UK Lottery Fund, GBP 16,000, PI).
 - 2006 KIIB, University of Duisburg-Essen, Duisburg, Germany
 - EU-EUREGIO project on business processes and email classification, in collaboration with d.velop AG, Gescher, Germany. PI.

Additional involvement in 10 further international and national research and knowledge transfer projects on information retrieval, digital libraries, digital humanities, risk assessment, cyberstalking, data science (EU H2020, EU-FP5, EU-FP6, EU ERDF, EPSRC, DFG).