

PERSONAL INFORMATION

Name Manfred Hauswirth
Birthday February 8, 1966
Nationality Austrian

CONTACT INFORMATION

Technische Universität Berlin, EECS
Open Distributed Systems (ODS)
Einsteinufer 25, HFT 3
10587 Berlin
<https://www.tu.berlin/ods>
Fraunhofer FOKUS
<http://www.fokus.fraunhofer.de>

RESEARCH INTERESTS

Data stream processing, Big Data and analytics, quantum computing, cyber-physical systems, artificial intelligence, data management, Internet of Things, security in distributed systems

SHORT CV

Prof. Dr. Manfred Hauswirth is the managing director (CEO) of the Fraunhofer Institute for Open Communication Systems (FOKUS) and a full professor for “Open Distributed Systems” at the Technical University Berlin. Before he had been deputy director of the Digital Enterprise Research Institute (DERI, now DSI) and a professor at the National University of Ireland, Galway.

His research is on distributed information systems, Internet of Things, data stream processing and Linked Data, semantics and AI. He has won several international awards for his work in these areas and is active in many scientific and political committees around digitization.

He is a director and principal investigator in the Weizenbaum Institute, the German Internet Institute, and a principal investigator in the Einstein Center Digital Future (ECDF), in the Berlin Big Data Center (BBDC), in the Berlin Institute for the Foundations of Learning and Data (BIFOLD) and in the Helmholtz-Einstein International Berlin Research School in Data Science (HEIBRiDS). Manfred Hauswirth is an Associate Editor of the IEEE Transactions on Services Computing and of the ACM Transactions on Internet Technology, a member of the IEEE Computer Society Conference Advisory Committee, partner in the Web Science Trust Network of Laboratories (WSTNet), co-speaker for the Fraunhofer strategic research field quantum computing and speaker of the competency network quantum computing of Fraunhofer, speaker of Fraunhofer’s Berlin Center for Digital Transformation (2016-2018), speaker of the Fraunhofer Center for the Security of Socio-Technical Systems (SIRIOS), a director of the Fraunhofer Academy, as well as a member in numerous boards, committees and expert networks around digitization.

Manfred Hauswirth is a senior member of the Institute of Electrical and Electronics Engineers (IEEE) and a senior member of the Association for Computing Machinery (ACM) and a member of the German Informatics Society (GI).

Born 1966 in St. Johann im Pongau, Salzburg, studied computer science the Technical University Vienna (Dipl.-Ing., 1993, Dr. techn., 1999), 2002-2006 senior researcher École Polytechnique Fédérale de Lausanne (EPFL), 2006-2014 professor National University of Ireland, Galway and deputy director Digital Enterprise Research Institute (DERI, now DSI). Since 2014 managing director (CEO) Fraunhofer Institute for Open Communication Systems (FOKUS) and full professor for “Open Distributed Systems” at Technical University Berlin.

CAREER

- 2024 – today Member of the NFDI senate (National Research Data Infrastructure)
- 2022 – today Co-speaker “Fraunhofer Strategic Research Field Quantum Technologies”
- 2021 – today Speaker “Fraunhofer Center for the Security of Socio-Technical Systems” (SIRIOS)
- 2020 – today Speaker “Excellency Network Quantum Computing” Fraunhofer Gesellschaft
- 2019 – today Co-speaker “Quantum Computing” Fraunhofer Gesellschaft

- 2018 – today Principal Investigator Berlin Big Data Center (BBDC)
2019 – today Principal Investigator Berlin Institute for the Foundations of Learning (BIFOLD)
2017 – today Director / Principal Investigator Weizenbaum Institute, Germany
2016 – today Principal Investigator Einstein Center Digital Future (ECDF), Germany
2016 – 2019 Speaker Fraunhofer Center of Excellence “Digital Networking”
2016 – today Principal Investigator Fraunhofer Center of Excellence “Digital Networking”
2014 – today Full Professor for Open Distributed Systems TU Berlin, Germany
2014 – today Managing Director, Fraunhofer FOKUS, Berlin, Germany
2014 Offer for full professor University of Lübeck, Germany (declined)
2014 Offer for full professor University of Innsbruck, Austria (declined)
2006 – 2014 Personal Professor, National University of Ireland, Galway
2006 – 2014 Vice Director, Digital Enterprise Research Institute (DERI), Galway, Ireland
2002 – 2006 Research Associate, EPFL, Lausanne, Switzerland
2005 Offer for professor, Università della Svizzera Italiana, Lugano, Switzerland
(declined)

EDUCATION

- 1994 - 1999 Dr. techn. (PhD, computer science), TU Vienna, Austria
1985 - 1994 Dipl.-Ing. (MSc, computer science), TU Vienna, Austria

SELECTED PRIZES

- 2021 “Honourable mention” (2nd), SWSA Ten-Year Award
2021 “Test-of-Time Award”, 22nd IEEE International Conference on Mobile Data Management
2014 Semantic Web Challenge, International Semantic Web Conference
2013 Best Demo Award Future Internet Assembly (among all EU projects)
2012 Internet of Things Challenge
2010 Best Demo Award, International Semantic Web Conference

MEMBERSHIPS

- Senior Member IEEE
Senior Member ACM
Member GI

BOARDS, EDITORSHIPS AND CONFERENCES

- Associate Editor, IEEE Transactions on Services Computing (IEEE TSC) until 12/2023
Associate Editor, ACM Transactions on Internet Technology (ACM TOIT)
Guest editor, IEEE Internet Computing, special issue on “Physical-Cyber-Social Computing” (2015)
Guest editor, International Journal on Semantic Web and Information Systems, special issue on “The Ubiquitous Semantic Web” (2015)
International Journal of Web Services Practices (IJWSP)
International Journal on Semantic Web and Information Systems (IJSWIS)
Semantic Web – Interoperability, Usability, Applicability
Studies on the Semantic Web

SELECTED ALUMNI

- G. Schiele Full Professor University Duisburg-Essen, Germany
 M. Zuniga Associate Professor, TU Delft, The Netherlands
 L. Shu Full Professor, Nanjing Agricultural University, China and Lincoln Professor,
 University of Lincoln, UK

ANNUAL COMPETITIVE THIRD-PARTY FUNDING (SELECTION)

- 2006 – today €3,000.000 – €4,000.000 / year
 2013 –2019 INSIGHT, Science Foundation Ireland
 2010 – 2017 EU projects: FIESTA, VITAL, OpenIoT, CityPulse, FiPS, GAMBAS,
 SPITFIRE
 2016 – today Fraunhofer Center of Excellence “Digital Networking”, Senate of Berlin and
 Fraunhofer
 2017 – today Weizenbaum Institute, BMBF
 2021 – today Fraunhofer Center for the Security of Socio-Technical Systems (SIRIOS)

Publikationen – H-Index 57 (Google Scholar / October 27, 2024)

	All	Since 2019
Citations	14.616	3.360
h-index	57	23
i10-index	160	62

<https://scholar.google.de/citations?user=WwjTJ3YAAAAJ>

SELECTED PUBLICATIONS

1. Jicheng Yuan, Anh Le-Tuan, Manh Nguyen-Duc, Trung-Kien Tran, Manfred Hauswirth, Danh Le Phuoc: VisionKG: Unleashing the Power of Visual Datasets via Knowledge Graph. ESWC (2) 2024: 75-93
2. Raphael Seidel, Nikolay Tcholtchev, Sebastian Bock, Manfred Hauswirth: Uncomputation in the Qrisp High-Level Quantum Programming Framework. RC 2023: 150-165
3. Michell Boerger, Philipp Lämmel, Nikolay Tcholtchev, Manfred Hauswirth: Enabling Short-Term Energy Flexibility Markets Through Blockchain. ACM Transactions on Internet Technology, 2022.
4. Abdelouahab Khelifati, Mourad Khayati, Philippe Cudré-Mauroux, Adrian Hänni, Qian Liu, Manfred Hauswirth: VADETIS: An Explainable Evaluator for Anomaly Detection Techniques. ICDE 2021: 2661-2664
5. Fabian Kirstein, Kyriakos Stefanidis, Benjamin Dittwald, Simon Dutkowski, Sebastian Urbanek, Manfred Hauswirth: Piveau: A Large-Scale Open Data Management Platform Based on Semantic Web Technologies. ESWC 2020: 648-664
6. Manh Nguyen Duc, Anh Lê Tuán, Jean-Paul Calbimonte, Manfred Hauswirth, Danh Le Phuoc: Autonomous RDF Stream Processing for IoT Edge Devices. JIST 2019: 304-319
7. Marcin Wylot, Manfred Hauswirth, Philippe Cudré-Mauroux, Sherif Sakr: RDF Data Storage and Query Processing Schemes: A Survey. ACM Comput. Surv. 51(4): 84:1-84:36 (2018)

8. Marcin Wylot, Philippe Cudré-Mauroux, Manfred Hauswirth, Paul T. Groth: Storing, Tracking, and Querying Provenance in Linked Data. *IEEE Trans. Knowl. Data Eng.* 29(8): 1751-1764 (2017)
9. Danh Le Phuoc, Hoan Nguyen Mau Quoc, Hung Ngo Quoc, Tuan Tran Nhat, Manfred Hauswirth: The Graph of Things: A step towards the Live Knowledge Graph of connected things. *J. Web Sem.* 37-38: 25-35 (2016)
10. Danh Le Phuoc, Minh Dao-Tran, Anh Lê Tuán, Manh Nguyen Duc, Manfred Hauswirth: RDF stream processing with CQELS framework for real-time analysis. *DEBS 2015*: 285-292
11. Marcel Karnstedt, Kai-Uwe Sattler, Manfred Hauswirth: P2P-Based Query Processing over Linked Data. *Linked Data Management 2014*: 339-368
12. Vinod Hegde, Josiane Xavier Parreira, Manfred Hauswirth: Semantic Tagging of Places Based on User Interest Profiles from Online Social Networks. *ECIR 2013*: 218-229
13. Michael Compton, Payam Barnaghi, Luis Bermudez, Raul Garca Castro, Oscar Corcho, Simon Cox, John Graybeal, Manfred Hauswirth, Cory Henson, Arthur Herzog, Vincent Huang, Krzysztof Janowicz, W. David Kelsey, Danh Le Phuoc, Laurent Lefort, Myriam Leggieri, Holger Neuhaus, Andriy Nikolov, Kevin Page, Alexandre Passant, Amit Sheth, and Kerry Taylor. The SSN Ontology of the Semantic Sensor Networks Incubator Group . In: *Journal of Web Semantics: Science, Services and Agents on the World Wide Web*, 17: 2532, 2012.
14. Manfred Hauswirth, Danh Le-Phuoc, Minh Dao-Tran, and Josiane Xavier Parreira. A native and adaptive approach for unified processing of linked streams and linked data . In: *International Semantic Web Conference*, 2011.
15. Manfred Hauswirth, Danh Le Phuoc, Axel Polleres, Giovanni Tummarello, and Christian Morbidoni. Rapid Prototyping of Semantic Mash-Ups through Semantic Web Pipes . In: *18th International World Wide Web Conference*, 2009.
16. Manfred Hauswirth, Karl Aberer, Philippe Cudre-Mauroux, AnwitamanDatta, Zoran Despotovic, Magdalena Puceva, and Roman Schmidt. P-Grid: A Self-organizing Structured P2P System. In: *SIGMOD Record*, 32(3), September 2003.
17. Manfred Hauswirth, Karl Aberer, and Ali Salehi. Infrastructure for data processing in largescale interconnected sensor networks. In: *8th International Conference on Mobile Data Management (MDM)*, 2007.
18. Manfred Hauswirth, Karl Aberer, and Philippe Cudré-Mauroux. The Chatty Web: Emergent Semantics through Gossiping. In: *Twelfth International World Wide Web Conference*, 2003.
19. Manfred Hauswirth, Karl Aberer, Magdalena Puceva, Roman Schmidt. Improving Data Access in P2P Systems. In: *IEEE Internet Computing*, 6(1), January/February 2002.
20. Manfred Hauswirth, Karl Aberer, and Philippe Cudré-Mauroux, Tim van Pelt. Grid-Vine: Building Internet-Scale Semantic Overlay Networks. In: *International Semantic Web Conference*, 2004.
21. Manfred Hauswirth, Anwitaman Datta, and Karl Aberer. Updates in Highly Unreliable, Replicated Peer-to-Peer Systems. In: *International Conference on Distributed Computing Systems (ICDCS)*, 2003.