Robert Wrembel

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Research degrees

2008:	DSc (habilitation - post-doctoral degree) in computer science (data warehouses, databases) - Poznan University of Technology
2001:	PhD in computer science (databases) - Poznan University of Technology

Positions held

since 2011:	**associate professor** (tenure) - Faculty of Computing and Telecommunications, Poznan University of Technology
2012-2016:	**deputy dean** for business cooperation - Faculty of Computing, Poznan University of Technology
2008-2012:	**deputy dean** for education - Faculty of Computing and Management, Poznan University of Technology
since 2009:	expert of the Polish Accreditation Commission
2007-2009:	associate professor at Kazimierz Wielki University (Bydgoszcz)

Industry experience

2002-2003:	consultant in IT company Rodan Systems (Warsaw)
1998-2005:	lecturer at Oracle Poland Education Center (specializing in database modeling, database administration and tuning, database application development, data warehouses)
since 1997:	author and co-author of tailored workshops and tutorials in the field of databases, database tuning, designing information systems, programming languages, delivered for multiple companies (including among others: IBM Poland, Microsoft Poland, BAE Systems, IMPAQ, Rodan Systems, Jeronimo Martins)

Projects

2019-2022:	Models and techniques for managing correctness and freshness of client data in a big financial institution, based on learning techniques. R&D grant supported by the National Center for Research and Development; **project coordinator** at Poznan University of Technology
2019 (4m):	Design and Optimization of Big Data Integration Architecture. Research grant supported by the Polish National Agency for Academic Exchange; **project coordinator** and main contractor
2019 (7m):	Research agenda for prediction models for energy consumption. R&D grant supported from European Regional Development Fund; university **project coordinator**
2012-2020	Erasmus Mundus Joint Doctorate Programme on Information Technologies for Business Intelligence (IT4BI-DC). Supported by the European Commission; **project coordinator** at Poznan University of Technology
2016-2019:	Analytical processing and mining of sequential data: models, algorithms, and data structures. Research project funded by Polish National Science Center (NCN), grant No. 2015/19/B/ST6/02637; main contractor

2014 (1y):	Verification Methodology for Real-Time Big Data & Mobile/Hybrid Cloud. R&D grant from Samsung Electronics; **project coordinator** at Poznan University of Technology
2013 (1y):	Cloud benchmarking. R&D grant from Samsung Electronics; **project coordinator** at Poznan University of Technology
2011-2013:	Development of computing infrastructure at GEOPOZ. Development grant from The City of Poznań; **project coordinator**
2011-2014:	Techniques, algorithms, and data structures supporting analytical processing and data mining of complex data types in advanced data warehouses and databases. Research project funded by Polish National Science Center (NCN), grant No. 2011/01/B/ST6/05169; main contractor
2010-2014:	Developing and improving teaching at the Poznan University of Technology in the field of computing technologies and their application in industry (Tech-INFO). Educational project funded by the European Social Fund, Priority IV, Subtask 4.1.2., Human Capital Operational Programme; **project coordinator**
2008-2011:	Algorithms and data structures supporting advanced analytical processing and data mining in data warehouses and databases. Research project funded by the Polish Ministry of Science and Higher Education, grant No. N N516 365834; main contractor
2002-2005:	Processing analytical and exploration queries in data warehouses. Research project funded by the Polish State Committee for Scientific Research, grant No. 8T11C 0810; contractor
2006 (1y):	Developing distance learning curricula for higher education in the computer science field of study. Educational project funded by the EU Structural Funds, grant No 6/2.1/C/2006; contractor
2002-2003:	Information system for the Polish Ministry of Infrastructure. Development project funded from the PHARE Fund, grant No. PL99/IB/TR/1/01/2001; contractor
2000-2001:	The construction and maintenance of materialised object-oriented views in data warehousing systems. Research project funded by the Polish State Committee for Scientific Research, grant No. 8T11C 01018; main contractor
2000-2001:	Designing an Object-Relational Data Warehousing System: Project ORDAWA. Research project funded from the Bilateral Austrian-Polish Program; main contractor
1998-2001:	Development and management of object-relational data warehouses. Research project funded by the Polish State Committee for Scientific Research, grant No. 8T11C 04315; main contractor
1997:	Information system for gathering and publishing Polish bibliographical data in the Internet. Development project funded by the Polish Academy of Sciences for the Institute of Literary Research; contractor
1996-1999:	Socrates - information system for managing a higher education institution. Industrial project funded by the Poznan University of Technology; contractor

Business certificates

2014:	ITIL Foundation International Certificate (No. 02878609-01-46XT)
2012:	Prince2 Foundation International Certificate (No. 02355798-01-4-VEA)

International visits and studies

2019 (4m):	visiting professor at Universitat Politècnica de Catalunya - BarcelonaTech (Barcelona, Catalunya, Spain)
2018 (1m):	visiting professor at Université Lyon 2 (Lyon, France)
2012 (2m):	post-graduate studies on entrepreneurship at Stanford University (Stanford, CA, USA)
2013 (1m):	visiting scholar at TARGIT (Tampa, FL, USA)
2011 (1m):	visiting professor at Universidad de Costa (San Jose, Costa Rica)
2001 (5m):	visiting professor at Loyola University (New Orleans, LA, USA)

1995 (3m):   Project VERSO, INRIA Rocquencourt (Paris, France)

Membership

since 2020:   chair of Working Group 2.6 - Databases, in the Iternational Federation for Information Processing (IFIP)

since 2018:   representative of Poland in IFIP Technical Committee TC2 - Software Engineering

since 2018:   regular editorial board member of the Data & Knowledge Engneering journal

since 2017:   member of IFIP Working Group 2.6 - Databases

2017-2020:   vice-chair of Polish Information Processing Society - Greater Poland Branch

2015-2018:   member of Automatics and Computer Science Committee in the Polish Academy of Sciences - Poznań Branch

2015-2016:   member of working group Development based on ICT - the Regional (Greater Poland) Forum of Intelligent Specializations

since 2015:   ACM professional member No. 6751367

International awards

2019:   International Federation for Information Processing (IFIP) Service Award

2019:   IBM Shared University Research Award

2010:   IBM Faculty Award for highly competitive research project

National awards

2019:   honorary title of an Ambassador of Polish Congresses

2016:   Silver Medal for Longstanding Service (from the President of the Republic of Poland)

2011:   Medal of the Polish National Education Committee (from the Minister of National Education)

since 1999:   10 awards of the Rector of the Poznan University of Technology (1999, 2004, 2008, 2009, 2010, 2013, 2015, 2016, 2018, 2020)

Reviewer for journals and publishers

ACM Computing Survey, Big Data Research (Elsevier), Communications of the ACM, Control and Cybernetics (Polish Academy of Science), Data and Knowledge Engineering (Elsevier), Ecological Informatics (Elsevier), Future Generation Computer Systems (Elsevier), IEEE Multimedia Journal, Information Sciences (Elsevier), Information and Software Technology (Elsevier), Information Systems (Elsevier), Information Systems Frontiers (Springer), Information Systems Management (Taylor & Francis), International Journal of Business Intelligence and Data Mining (Inderscience), International Journal of Data Warehousing and Mining (IGI Global), International Journal of Web Engineering and Technology (Inderscience), Journal on Data Semantics (Springer), Journal of Global Information Technology Management (Ivy League Publishing), Journal of Parallel and Distributed Computing (Elsevier), Knowledge and Information Systems (Springer); book reviews for: Prentice Hall and Springer

Member of steering committees

since 2018:   International Workshop On Design, Optimization, Languages and Analytical Processing of Big Data (DOLAP)

since 2013:   European Conference on Advances in Databases and Information Systems (ADBIS)

International events' organizer

2020:   PC co-chair of European Conference on Advances in Databases and Information Systems (ADBIS)

2019:   PC co-chair of International Workshop On Design, Optimization, Languages and Analytical Processing of Big Data (DOLAP) @EDBT/ICDT

2019:	Workshops co-chair @European Conference on Advances in Databases and Information Systems (ADBIS)
2018:	organizing chair of IFIP World Computer Congress (http://wcc2018.org/)
2018:	PC co-chair of International Workshop On Design, Optimization, Languages and Analytical Processing of Big Data (DOLAP) @EDBT/ICDT
2017:	Workshops co-chair @European Conference on Advances in Databases and Information Systems (ADBIS)
2015:	PC co-chair of IFIP International Conference on Computer Science and its Applications (CIIA)
2015:	PC co-chair of Workshop on Managing Evolving Business Intelligence Systems (MEBIS) @European Conference on Advances in Databases and Information Systems (ADBIS)
2012:	PC co-chair, treasurer, and organizer of European Conference on Advances in Databases and Information Systems (ADBIS)
2009:	PC chair of Workshop on Managing Evolution of Data Warehouses @European Conference on Advances in Databases and Information Systems (ADBIS)

PC member of conferences (selected)

Since 2001: numerous international conferences including among others: ACM SIGMOD (demo track, 2014); VLDB (demo track, 2015); ICDE (demo track, 2016, 2021); Int. Workshop on Design, Optimization, Languages and Analytical Processing of Big Data (DOLAP); Int. Conf. on Data Warehousing and Knowledge Discovery (DaWaK); Int. Conf. on Conceptual Modeling (ER); European Conf. on Advances in Databases and Information Systems (ADBIS); Int. Conf. on Data Science, Technology and Applications (DATA); Int. Conf. on Model and Data Engineering (MEDI).

Publication record

My overall publication record includes 83 items, out of which 75 are listed at DBLP. Journals where I have published include among others: the VLDB Journal, Information Systems, Information Systems Frontiers, Data & Knowledge Engineering, Computer Standards & Interfaces, Journal on Data Semantics, Information & Software Technology, Int. Journal of Data Warehousing and Mining. Conference proceedings where I have published include among others: EDBT, DAWAK, ADBIS, DOLAP, ADBIS-DASFAA, DEXA, ACM SAC, BIRTE, ASONAM.

Journal special issues/sections

- L. Bellatreche, J. Darmont, B. Novikov, R. Wrembel: Advances on Data Management and Information Systems. *Information Systems Frontiers*, special issue, to appear in 2021
- L. Bellatreche, J. Darmont, B. Novikov, R. Wrembel: Data Processing in Modern Distributed Architectures. *Information Systems*, special issue, to appear in 2021
- S. Chiusano, T. Cerquitelli, R. Wrembel, D. Quercia: Breakthroughs on Cross-Cutting Data Management, Data Analytics and Applied Data Science. *Information Systems Frontiers*, special issue, 2020
- O. Romero, R. Wrembel, I.-Y. Song: Trends in Design, Optimization, Languages, and Analytical Processing of Big Data. *Information Systems*, special section, Vol. 92, Sep 2020
- J. Gamper, M. Ivanovic, R. Wrembel: Advances in Databases and Information Systems. *Computer Science and Information Systems*, special issue, 17(3), 2020
- R. Wrembel, A. Abelló, I.-Y. Song: Design, Optimization, Languages and Analytical Processing of Big Data. *Information Systems*, special section, Vol. 85, Nov 2019
- J. Gamper, R. Wrembel. *Applied Mathematics and Computer Science*, special section, No. 1, Mar 2019
- J. Stefanowski, K. Krawiec, R. Wrembel: Exploring Complex and Big Data. *Applied Mathematics and Computer Science*, special section, No. 4, Dec 2017
- L. Bellatreche, R. Wrembel: Evolution and Versioning in Semantic Data Integration Systems. *Journal on Data Semantics*, special issue, 2(2-3), 2013

Books and edited volumes (selected)

- J. Darmont, B. Novikov, R. Wrembel: Advances in Databases and Information Systems. *Springer LNCS* 12245, 2020
- L. Bellatreche, M. Bieliková, O. Boussaid, B. Catania, J. Darmont, E. Demidova, F. Duchateau, M.M. Hall, T. Mercun, B. Novikov, C. Papatheodorou, T. Risse, O. Romero, L. Sautot, G. Talens, R. Wrembel, M. Zumer. *Springer CCIS* 1260, 2020
- J. Darmont, B. Novikov, R. Wrembel: New Trends in Databases and Information Systems. *Springer CCIS* 1259, 2020
- T. Welzer, J. Eder, V. Podgorelec, R. Wrembel, M. Ivanovic, J. Gamper, M. Morzy, T. Tzouramanis, J. Darmont, A. Kamisalic Latific: New Trends in Databases and Information Systems. *Springer CCIS* 1064, 2019
- M. Kirikova, K. Nørvåg, G.A. Papadopoulos, J. Gamper, R. Wrembel, J. Darmont, S. Rizzi: New Trends in Databases and Information Systems. *Springer CCIS* 767, 2017
- Amine, L. Bellatreche, Z. Elberrichi, E.J. Neuhold, R. Wrembel: IFIP TC 5 International Conference on Computer Science and Its Applications (CIIA). IFIP Advances in Information and Communication Technology, *Springer AICT* 456, 2015
- T. Morzy, T. Härder, R. Wrembel: Advances in Databases and Information Systems. Advances in Databases and Information Systems, *Springer LNCS* 7503, 2012
- T. Morzy, T. Härder, R. Wrembel: Advances in Databases and Information Systems. *Springer AISC* 186, 2012

Invited talks and panels

- *Int. Conference on Social Networks Analysis, Management and Security*(SNAMS); topic: Still Open Problems in Data Warehouse and Data Lake Research; 2020, virtual; *invited talk*
- *Pozitive Tech Conference*; topic: Development directions of IT in the Poznan agglomeration; 2020, virtual; 430 spectators; *panel*
- *Workshop on Novel Techniques for Integrating Big Data* @ADBIS; topic: Novel Big Data Integration Techniques - What is New?; 2017, Cyprus; *panel*
- *Conference Entrepôts de Données et l'Analyse en ligne* (EDA); topic: On Warehousing Sequential Data; 2017, France; *invited talk*
- *Int. Conference on Conceptual Modeling* (ER); topic: Big Data and Conceptual models: Are they mutually compatible?; 2016, Japan; *panel*
- *Polish-Swiss Innovation Day*; topic: Innovations in business and research; 2016, Poland; *panel*
- *Polish Business Congress*; topic: Co-operation between business and academia; Warsaw, 2014; *panel*
- European Business Intelligence Summer School (eBISS); topic: Data Warehouse Physical Design; Germany, 2013; *tutorial*
- *Universidad de Costa Rica*; topic: On Building Integrated and Distributed Database Systems; Costa Rica, 2011; *tutorial*

Foreign languages

- English: C1
- Spanish: B2 - International Spanish language certificate by Instituto Cervantes (2018, Madrid), C1.1 - certificate by Universidad de Barcelona (2019, Barcelona)
- French: A2