

Curriculum Vitae

Stefan Manegold

January 22, 2010

Personalialia

Full name Stefan Manegold

Affiliation Centrum Wiskunde & Informatica (CWI)
Science Park 123
1098 XG Amsterdam
The Netherlands

Telephone +31-20-5924212 (office)

E-mail address Stefan.Manegold@CWI.nl
WWW address <http://www.cwi.nl/~manegold/>

Examination

December 2002 *Ph.D in Computer Science*
University of Amsterdam (UvA), The Netherlands
Thesis: *Understanding, Modeling, and Improving Main-Memory Database Performance*
Supervisor: Prof. Dr. M. L. Kersten
Committee: Prof. Dr. D. J. DeWitt, Dr. P. van Emde Boas, Prof. Dr. L. O. Hertzberger, Prof. Dr. A. P. J. M. Siebes, Prof. Dr. G. Weikum

September 1994 *M.Sc (Diploma) in Computer Science*
Technical University Clausthal (TUC), Germany
Thesis: *Extending Nested Transactions for the OSCAR Project*
Supervisors: Prof. Dr. A. Heuer, Prof. Dr. K. Ecker

Education

1988 – 1994 Technical University Clausthal (TUC), Germany
Major: Informatics
Minor: Automatic Control Technology
Specialization: Relational and object-oriented database systems

1979 – 1988 High School (Gymnasium)
Friedrich-Wilhelm-Schule & Oberstufengymnasium Eschwege, Germany

Professional Experience

since 1997 *Database researcher* (senior/tenure since 2003)
Centre for Mathematics and Computer Science (CWI) in Amsterdam, The Netherlands
Database Group with Prof. Dr. M. L. Kersten
Projects:
- MonetDB: A Novel Main Memory Database Kernel — Query Processing at Light Speed
- CONQUER: Multi-Query Optimization for Data Mining Applications
- MIA: Multimedia Information Analysis

- MultimediaN: Multimedia is the Message
- BRICKS: Basic Research in Informatics for Creating the Knowledge Society

1995 – 1997

Research assistant

Humboldt-University Berlin, Germany, Institute for Informatics
Database Group with Prof. J.-C. Freytag, Ph.D.

Project:

- Query Evaluation and Optimization in Parallel Databases
(funded by the German Research Foundation)

1994 – 1995

Compulsory Military Service

Computing Center of the German Air Force

System administration on Siemens mainframes (H90 & 7.580i) running BS 2000

1991 – 1994

Student-assistant

Technical University Clausthal, Germany, Institute for Informatics

Database Group with Prof. Dr. A. Heuer and

Data-management Group with Prof. Dr. D.P.F. Möller

Projects:

- Design and implementation of a data dictionary and a data definition language for the object-oriented database system OSCAR
- Design of a database schema for a medical information system
- Design and implementation of a data dictionary (meta-schema) for an object-oriented database system on top of ObjectStore

1988 – 1992

Free-lance programmer

Design, implementation, and administration of several dBase applications for a metalworking company

Professional Activities & Community Services

2010

- Repeatability & Workability Evaluation Co-Chair of SIGMOD 2010
- Program Committee member of SIGMOD 2010
- Program Committee member of ICDE 2010 (Track “Systems, Experiments, Applications”)
- Program Committee member of EDBT 2010

2009

- Repeatability & Workability Evaluation Co-Chair of SIGMOD 2009
- Demonstration Program Committee Chair of EDBT 2009
- Co-Organizer of EDBT 2009 Tutorial “Performance Evaluation in Database Research: Principles and Experience”
- Program Committee member of VLDB 2009 E&A Track
- Program Committee member of ICDE 2009 (Track “Transaction and workflow management, database architectures”)
- Program Committee member of SMDB 2009
- Program Committee member of BTW 2009

2008

- Co-Organizer of ICDE 2008 Seminar “Performance Evaluation in Database Research: Principles and Experience”
- Experimental Repeatability Committee member of SIGMOD 2008
- Program Committee member of EDBT 2008
- Demonstration Program Committee member of ICDE 2008
- Program Committee member of VLDB 2008 PhD Workshop

2007

- Co-Organizer of VLDB 2007 Panel “Performance Evaluation and Experimental Assessment — Conscience or Curse of Database Research?”
- Co-Organizer of the Second International Workshop on Performance and Evaluation of Data Management Systems (ExpDB 2007; Sponsored by and colocated with ACM SIGMOD/PODS 2007)

- Program Committee member of DASFAA 2007
 - Program Committee member of DEXA 2007
 - Program Committee member of BTW 2007
- 2006
- Co-Organizer of the Second International Workshop on Data Management on New Hardware (DaMoN 2006; Sponsored by and colocated with ACM SIGMOD/PODS 2006)
 - Demonstration Program Committee member of VLDB 2006
 - Program Committee member of EDBT 2006 PhD Workshop
 - Program Committee member of QLQP 2006 (EDBT Workshop)
 - Program Committee member of DASFAA 2006
- 2005
- Co-Organizer of the First International Workshop on Data Management on New Hardware (DaMoN 2005; Sponsored by and colocated with ACM SIGMOD/PODS 2005)
 - Program Committee member of VLDB 2005 (Core Database Technology)
- 2004
- Program Committee member of SAC 2004 (Database track)
- since 2006
- Teaching course “Advanced Database Techniques” at the University of Amsterdam
- since 2004
- Teaching course “Database Techniques” at the University of Amsterdam
 - Supervising Masters Students & PhD Students
- since 1996
- External reviewer for various conferences and journals, a.o.:
SAC, EDBT, ICDE, VLDB, SIGMOD, PODS, FGCS, VLDB Journal, TKDE, TODS, TOIS,
Information Systems

Research Interests

- Main-Memory Database Systems:
 - Architectures
 - Data structures and query processing algorithms
 - Query execution and optimization techniques
 - Cost models
- Parallel and Distributed Database Systems:
 - Query execution in shared-memory & shared-nothing environments
 - Query optimization and cost models
- Processor architectures and hierarchical cache memories
- XML storage and XQuery processing using relational database technology

Technical Skills

General skills in computer science. Specific expertise in:

- Computing platforms: several UNIX variants, with a focus on Linux, and some Windows experience.
- Cross-platform software development: Linux (on AMD, Intel & StrongARM), Solaris, IRIX, AIX, MacOS X, CygWin, Windows
- System administration: cluster of Linux PCs, Siemens mainframes (H90 & 7.580i) running BS 2000
- Programming languages: fluent in C, C++, Pascal, Basic, SQL, dBase, Python, (ba)sh; some experience in Perl, prolog, assembly, Java
- Parallel programming experience in C/C++ using PVM and MPI on a cluster of Sun workstations and on a CRAY T3E

Languages

German (native), English (fluent), Dutch (reasonably fluent), French (basic)

Publications

Proceedings (edited)

- [1] M. L. Kersten and B. Novikov and J. Teubner and V. Polutin and S. Manegold, editor. *12th International Conference on Extending Database Technology (EDBT 2009)*, Saint Petersburg, Russia, March 2009.
- [2] P. Bonnet and S. Manegold, editor. *Second International ACM/SIGMOD Workshop on Performance and Evaluation of Data Management Systems (ExpDB 2007)*, Beijing, China, June 2007.
- [3] A. Ailamaki and P. A. Boncz and S. Manegold, editor. *Second International ACM/SIGMOD Workshop on Data Management on New Hardware (DaMoN 2006)*, Chicago, IL, USA, June 2006.
- [4] A. Ailamaki and P. A. Boncz and S. Manegold, editor. *First International ACM/SIGMOD Workshop on Data Management on New Hardware (DaMoN 2005)*, Baltimore, MD, USA, June 2005.

Theses

- [1] S. Manegold. *Understanding, Modeling, and Improving Main-Memory Database Performance*. PhD thesis, Universiteit van Amsterdam, Amsterdam, The Netherlands, December 2002.
- [2] S. Manegold. Extending Nested Transactions for the OSCAR-Project. Master's thesis, Technische Universität Clausthal, Institut für Informatik, Clausthal-Zellerfeld, Germany, September 1994. In German.

Book Chapters

- [1] S. Manegold. Cost Estimation. In L. Liu and M. T. Özsu, editors, *Encyclopedia of Database Systems*, pages 506–511. Springer-Verlag, Heidelberg, Germany, October 2009.
- [2] S. Manegold. Memory Hierarchy. In L. Liu and M. T. Özsu, editors, *Encyclopedia of Database Systems*, pages 1707–1713. Springer-Verlag, Heidelberg, Germany, October 2009.
- [3] S. Manegold. Locality. In L. Liu and M. T. Özsu, editors, *Encyclopedia of Database Systems*, pages 1713–1714. Springer-Verlag, Heidelberg, Germany, October 2009.
- [4] A. R. Schmidt, S. Manegold, and M. L. Kersten. Storing XML Documents in Databases. In L. C. Rivero, J. H. Doorn, and V. E. Ferragaine, editors, *Encyclopedia of Database Technologies and Applications*, pages 658–664. Idea Group Publishing, August 2005.
- [5] A. R. Schmidt, F. Waas, S. Manegold, and M. L. Kersten. A Look Back on the XML Benchmark Project. In H. M. Blanken, T. Grabs, H.-J. Schek, R. Schenkel, and G. Weikum, editors, *Intelligent Search on XML*, volume 2818 of *Lecture Notes in Computer Science*, chapter 18, pages 263–278. Springer-Verlag, Berlin, New York, etc., August 2003.
- [6] S. Manegold and F. Waas. Integrating I/O processing and Transparent Parallelism — Toward Comprehensive Query Execution in Parallel Database Systems. In A. Dogaç, M. T. Özsu, and Ö. Ulusoy, editors, *Current Trends in Data Management Technology*, chapter 8, pages 130–152. Idea Group Publishing, Hershey, PA, USA, January 1999.

Journals

- [1] S. Manegold, I. Manolescu, L. Afanasiev, J. Feng, G. Gou, M. Hadjieftheriou, S. Harizopoulos, P. Kalnis, K. Karanasos, D. Laurent, M. Lupu, N. Onose, C. Re, V. Sans, P. Senellart, T. Wu, and D. Shasha. Repeatability & Workability Evaluation of SIGMOD 2009. *ACM SIGMOD Record*, 38(1):40–43, September 2009.
- [2] S. Manegold, M. L. Kersten, and P. A. Boncz. Database Architecture Evolution: Mammals Flourished long before Dinosaurs became Extinct. *Proceedings of the VLDB Endowment*, 2(2):1648–1653, 2009. 10-year Best Paper Award paper for VLDB 1999 conference paper.
- [3] P. A. Boncz, M. L. Kersten, and S. Manegold. Breaking the Memory Wall in MonetDB. *Communications of the ACM*, 51(12):77–85, December 2008.

- [4] L. Sidirourgos, R. Goncalves, M. L. Kersten, N. Nes, and S. Manegold. Column-Store Support for RDF Data Management: not all swans are white. *Proceedings of the VLDB Endowment*, 1(2):1553–1563, 2008.
- [5] I. Manolescu, L. Afanasiev, A. Arion, J.-P. Dittrich, S. Manegold, N. Polyzotis, K. Schnaitter, P. Senellart, S. Zoupanos, and D. Shasha. The repeatability experiment of SIGMOD 2008. *ACM SIGMOD Record*, 37(1):39–45, March 2008.
- [6] S. Manegold. An Empirical Evaluation of XQuery Processors. *Information Systems*, 33(2):203–220, April 2008. Updated and extended version of ExpDB 2006 workshop paper.
- [7] A. Ailamaki, P. A. Boncz, and S. Manegold. Report on the Second International Workshop on Data Management on Modern Hardware (DaMoN’06). *ACM SIGMOD Record*, 35(4):46–47, December 2006.
- [8] S. Manegold, P. A. Boncz, and M. L. Kersten. Optimizing Main-Memory Join On Modern Hardware. *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 14(4):709–730, July 2002.
- [9] S. Manegold, P. A. Boncz, and M. L. Kersten. Optimizing Database Architecture for the New Bottleneck: Memory Access. *The VLDB Journal*, 9(3):231–246, December 2000.

Conferences & Workshops

- [1] R. Abdel Kader, P. A. Boncz, S. Manegold, and M. van Keulen. ROX: The Robustness of a Run-time XQuery Optimizer Against Correlated Data. In *Proceedings of the IEEE International Conference on Data Engineering (ICDE)*, pages ?–?, Long Beach, CA, USA, March 2010. (Demo).
- [2] S. Manegold, M. L. Kersten, and P. A. Boncz. Database Architecture Evolution: Mammals Flourished long before Dinosaurs became Extinct. In *Proceedings of the International Conference on Very Large Data Bases (VLDB)*, pages 1648–1653, Lyon, France, August 2009. 10-year Best Paper Award paper for [22].
- [3] R. Abdel Kader, P. A. Boncz, S. Manegold, and M. van Keulen. ROX: Run-time Optimization of XQueries. In *Proceedings of the ACM SIGMOD International Conference on Management of Data (SIGMOD)*, pages 615–626, Providence, RI, USA, June 2009.
- [4] S. Idreos, M. L. Kersten, and S. Manegold. Self-organizing Tuple Reconstruction in Column-stores. In *Proceedings of the ACM SIGMOD International Conference on Management of Data (SIGMOD)*, pages 297–308, Providence, RI, USA, June 2009.
- [5] F. Groffen, M. L. Kersten, and S. Manegold. Optimising Client Accesses within Armada. In *Workshop on Dependable Distributed Data Management (WDDDM)*, Nuremberg, Germany, March 2009.
- [6] L. Sidirourgos, R. Goncalves, M. L. Kersten, N. Nes, and S. Manegold. Column-Store Support for RDF Data Management: not all swans are white. In *Proceedings of the International Conference on Very Large Data Bases (VLDB)*, pages 1553–1563, Auckland, New Zealand, September 2008.
- [7] S. Idreos, M. L. Kersten, and S. Manegold. Updating a Cracked Database. In *Proceedings of the ACM SIGMOD International Conference on Management of Data (SIGMOD)*, pages 413–424, Beijing, China, June 2007.
- [8] F. Groffen, M. L. Kersten, and S. Manegold. Armada: a Reference Model for an Evolving Database System. In *GI-Fachtagung für Datenbanksysteme in Business, Technologie und Web (BTW)*, pages 417–435, Aachen, Germany, March 2007.
- [9] S. Idreos, M. L. Kersten, and S. Manegold. Database Cracking. In *Proceedings of the Biennial Conference on Innovative Data Systems Research (CIDR)*, pages 68–78, Asilomar, CA, USA, January 2007.
- [10] S. Manegold. An Empirical Evaluation of XQuery Processors. In *Proceedings of the International Workshop on Performance and Evaluation of Data Management Systems (ExpDB)*, pages 40–53, Chicago, IL, USA, June 2006. Updated and extended version available in *Information Systems*, 33(2), April 2008, and as CWI Technical Report INS-E0704.
- [11] P. A. Boncz, T. Grust, M. van Keulen, S. Manegold, J. Rittinger, and J. Teubner. MonetDB/XQuery: A Fast XQuery Processor Powered by a Relational Engine. In *Proceedings of the ACM SIGMOD International Conference on Management of Data (SIGMOD)*, pages 479–490, Chicago, IL, USA, June 2006.
- [12] P. A. Boncz, J. Flokstra, T. Grust, M. van Keulen, S. Manegold, K. S. Mullender, J. Rittinger, and J. Teubner. MonetDB/XQuery—Consistent & Efficient Updates on the Pre/Post Plane. In *Proceedings of the International Conference on Extending Database Technology (EDBT)*, number 3896 in Lecture Notes in Computer Science, pages 1190–1193, Munich, Germany, March 2006. (Demo).

- [13] P. A. Boncz, T. Grust, M. van Keulen, S. Manegold, J. Rittinger, and J. Teubner. Pathfinder: XQuery—The Relational Way. In *Proceedings of the International Conference on Very Large Data Bases (VLDB)*, pages 1322–1325, Trondheim, Norway, September 2005. (Demo).
- [14] P. A. Boncz, S. Manegold, and J. Rittinger. Updating the Pre/Post Plane in MonetDB/XQuery. In *Proceedings of the International Workshop on XQuery Implementation, Experience and Perspectives (XIME-P)*, Baltimore, MD, USA, June 2005.
- [15] M. L. Kersten and S. Manegold. Cracking the Database Store. In *Proceedings of the Biennial Conference on Innovative Data Systems Research (CIDR)*, pages 213–224, Asilomar, CA, USA, January 2005.
- [16] S. Manegold, P. A. Boncz, N. Nes, and M. L. Kersten. Cache-Conscious Radix-Decluster Projections. In *Proceedings of the International Conference on Very Large Data Bases (VLDB)*, pages 684–695, Toronto, ON, Canada, August 2004.
- [17] A. R. Schmidt, S. Manegold, and M. L. Kersten. Integrated Querying of XML Data in RDBMSs. In *Proceedings of the ACM Symposium on Applied Computing (SAC)*, pages 509–514, Melbourne, FL, USA, March 2003.
- [18] S. Manegold, P. A. Boncz, and M. L. Kersten. Generic Database Cost Models for Hierarchical Memory Systems. In *Proceedings of the International Conference on Very Large Data Bases (VLDB)*, pages 191–202, Hong Kong, China, August 2002.
- [19] M. L. Kersten, S. Manegold, P. A. Boncz, and N. Nes. Macro- and Micro- Parallelism in a DBMS. In *Proceedings of the European Conference on Parallel Processing (EuroPar)*, number 2150 in Lecture Notes in Computer Science, pages 6–15, Manchester, UK, August 2001.
- [20] S. Manegold, P. A. Boncz, and M. L. Kersten. What happens during a Join? — Dissecting CPU and Memory Optimization Effects. In *Proceedings of the International Conference on Very Large Data Bases (VLDB)*, pages 339–350, Cairo, Egypt, September 2000.
- [21] S. Manegold, A. Pellenkoft, and M. L. Kersten. A Multi-Query Optimizer for Monet. In *Proceedings of the British National Conference on Databases (BNCOD)*, number 1832 in Lecture Notes in Computer Science, pages 36–51, Exeter, United Kingdom, July 2000.
- [22] P. A. Boncz, S. Manegold, and M. L. Kersten. Database Architecture Optimized for the New Bottleneck: Memory Access. In *Proceedings of the International Conference on Very Large Data Bases (VLDB)*, pages 54–65, Edinburgh, Scotland, UK, September 1999. Received 10-year Best Paper Award at VLDB 2009 [2].
- [23] S. Manegold, F. Waas, and M. L. Kersten. Transparent Parallelism in Query Execution. In *Proceedings of the International Conference on Management of Data (COMAD)*, pages 217–234, Hyderabad, India, December 1998.
- [24] S. Manegold and J. K. Obermaier. Efficient Resource Utilization in Shared-Everything Environments. In *Proceedings of the International Workshop on Issues and Applications of Database Technology (IADT)*, pages 209–216, Berlin, Germany, July 1998.
- [25] S. Manegold and F. Waas. Thinking Big in a Small World — Efficient Query Execution on Small-scale SMPs. In Jonathan Schaeffer, editor, *Proceedings of the International Symposium on High Performance Computing Systems and Applications (HPCS)*, chapter 14, pages 133–146. Kluwer Academic Publishers, Edmonton, AL, Canada, May 1998.
- [26] S. Manegold, F. Waas, and D. Gudlat. In Quest of the Bottleneck - Monitoring Parallel Database Systems. In *Proceedings of the European PVM-MPI Users' Group Meeting*, number 1332 in Lecture Notes in Computer Science, pages 277–284, Cracow, Poland, November 1997.
- [27] S. Manegold, J. K. Obermaier, and F. Waas. Load Balanced Query Evaluation in Shared-Everything Environments. In *Proceedings of the European Conference on Parallel Processing (EuroPar)*, number 1300 in Lecture Notes in Computer Science, pages 1117–1124, Passau, Germany, August 1997.
- [28] S. Manegold. Efficient Data-Parallel Query Processing in Shared-Everything Environments. In *Technologie für Parallele Datenbanksysteme — Bericht zum Workshop*, München, Germany, February 1997. Technische Universität München, Institut für Informatik. In German.

Technical Reports

- [1] S. Manegold. An Empirical Evaluation of XQuery Processors. Technical Report INS-E0704, CWI, Amsterdam, The Netherlands, March 2006. Updated and extended version of ExpDB 2006 workshop paper.
- [2] F. Groffen, M. L. Kersten, and S. Manegold. Armada: A Reference Model for an Evolving Database System. Technical Report INS-E0603, CWI, Amsterdam, The Netherlands, May 2006.
- [3] P. A. Boncz, T. Grust, M. van Keulen, S. Manegold, J. Rittinger, and J. Teubner. Loop-lifted Staircase Join: from XPath to XQuery. Technical Report INS-E0510, CWI, Amsterdam, The Netherlands, May 2005.
- [4] P. A. Boncz, S. Manegold, and J. Rittinger. Updating the Pre/Post Plane in MonetDB/XQuery. Technical Report INS-E0506, CWI, Amsterdam, The Netherlands, April 2005.
- [5] P. A. Boncz, T. Grust, S. Manegold, J. Rittinger, and J. Teubner. Pathfinder: Relational XQuery Over Multi-Gigabyte XML Inputs In Interactive Time. Technical Report INS-E0503, CWI, Amsterdam, The Netherlands, March 2005.
- [6] M. L. Kersten and S. Manegold. Cracking the database store. Technical Report INS-E0408, CWI, Amsterdam, The Netherlands, September 2004.
- [7] S. Manegold, P. A. Boncz, N. Nes, and M. L. Kersten. Cache-Conscious Radix-Decluster Projections. Technical Report INS-E0406, CWI, Amsterdam, The Netherlands, June 2004.
- [8] S. Manegold, P. A. Boncz, and M. L. Kersten. Generic Database Cost Models for Hierarchical Memory Systems. Technical Report INS-R0203, CWI, Amsterdam, The Netherlands, March 2002.
- [9] S. Manegold, A. Pellenkoft, and M. L. Kersten. A Multi-Query Optimizer for Monet. Technical Report INS-R0002, CWI, Amsterdam, The Netherlands, January 2000.
- [10] S. Manegold, P. A. Boncz, and M. L. Kersten. Optimizing Main-Memory Join On Modern Hardware. Technical Report INS-R9912, CWI, Amsterdam, The Netherlands, October 1999.
- [11] S. Manegold, F. Waas, and M. L. Kersten. On Optimal Pipeline Processing in Parallel Query Optimization. Technical Report INS-R9805, CWI, Amsterdam, The Netherlands, February 1998.
- [12] S. Manegold and J. K. Obermaier. Efficient Resource Utilization in Shared-Everything Environments. Technical Report INS-R9711, CWI, Amsterdam, The Netherlands, December 1997.
- [13] S. Manegold, J. K. Obermaier, and F. Waas. Flexible Query Optimization in Parallel Database Systems (Working Paper). Technical Report HUB-IB-80, Humboldt-Universität zu Berlin, Institut für Informatik, Berlin, Germany, February 1997. In German.
- [14] S. Manegold, J. K. Obermaier, and F. Waas. Load Balanced Query Evaluation in Shared-Everything Environments (Extended Version). Technical Report HUB-IB-70, Humboldt-Universität zu Berlin, Institut für Informatik, Berlin, Germany, September 1996.
- [15] S. Manegold, J. K. Obermaier, F. Waas, and J.-C. Freytag. Load Balanced Query Evaluation in Shared-Everything Environments. Technical Report HUB-IB-61, Humboldt-Universität zu Berlin, Institut für Informatik, Berlin, Germany, June 1996.
- [16] S. Manegold, J. K. Obermaier, F. Waas, and J.-C. Freytag. Data Threaded Query Evaluation in Shared-Everything Environments. Technical Report HUB-IB-58, Humboldt-Universität zu Berlin, Institut für Informatik, Berlin, Germany, April 1996.
- [17] S. Manegold, C. Hörner, and A. Heuer. A Look Back on IRIS — Final Report of a Database Research Project. Technical Report Informatik-Bericht 93/7, Technische Universität Clausthal, Institut für Informatik, Clausthal-Zellerfeld, Germany, July 1993. In German.

Tutorials, Seminars, Panels, Presentations, Lectures, Courses

Tutorials, Seminars, & Panels

- [1] I. Manolescu and S. Manegold. Performance Evaluation in Database Research: Principles and Experience. In *Proceedings of the International Conference on Extending Database Technology (EDBT)*, page 1156, St. Petersburg, Russia, March 2009. (Tutorial).

- [2] I. Manolescu and S. Manegold. Performance Evaluation in Database Research: Principles and Experience. In *Proceedings of the IEEE International Conference on Data Engineering (ICDE)*, pages ?–?, Cancun, Mexico, April 2008. (Seminar/Tutorial).
- [3] I. Manolescu and S. Manegold. Performance Evaluation and Experimental Assessment — Conscience or Curse of Database Research? In *Proceedings of the International Conference on Very Large Data Bases (VLDB)*, pages 1441–1442, Vienna, Austria, September 2007. (Panel).

Invited Presentations & Lectures

- [1] S. Manegold. *Performance Evaluation in Database Research: Principles and Experience*. Technische Universität Berlin, Institut für Softwaretechnik und Theoretische Informatik, Berlin, Germany, January 2010. Invited Talk.
- [2] S. Manegold. *MonetDB: Open-source Database Technology Beyond Textbooks*. Humboldt-Universität zu Berlin, Institut für Informatik, Berlin, Germany, January 2010. Invited Talk.
- [3] S. Manegold. *High-performance Database Technology beyond Textbooks — Forget (almost) everything you were taught at school/university*. Hochschule Heilbronn, Fakultät für Informatik, Heilbronn, Germany, January 2008. Invited Talk.
- [4] S. Manegold. *MonetDB/XQuery: A High-performance XQuery Processor Powered by a Relational Engine*. Renmin University of China, School of Information, Department of Computer Science and Technology, Beijing, China, June 2007. Invited Talk.
- [5] S. Manegold. *The MonetDB Database Kernel: Architecture & Insights*. Renmin University of China, School of Information, Department of Computer Science and Technology, Beijing, China, June 2007. Invited Talk.
- [6] P. A. Boncz, T. Grust, M. van Keulen, S. Manegold, J. Rittinger, and J. Teubner. *Pathfinder: XQuery—The Relational Way*. IEEE International Conference on Multimedia & Expo (ICME), Amsterdam, The Netherlands, July 2005. Poster & Demo.
- [7] S. Manegold. *Releasing MonetDB/XQuery — Technology Preview 1*. Holland Open Software Conference, Amsterdam, The Netherlands, May 2005. Invited Talk.
- [8] S. Manegold. *High-Performance Database Technology made in Holland*. University of Massachusetts Amherst, Department of Computer Science, Knowledge Discovery Laboratory, Amherst, MA, USA, August 2004. Invited Talk.
- [9] S. Manegold. *High-Performance Database Technology for Hierarchical Memory Systems*. Free University of Bozen-Bolzano, Faculty of Computer Science, Bolzano/Bozen, Italy, June 2004. Invited Talk.
- [10] S. Manegold. *The Impact of Modern Hardware Developments on Database Performance – or – The (Fairy) Tale of “Random Access” Memory*. SAP AG, T-REX Group, Walldorf, Germany, May 2004. Invited Talk.
- [11] S. Manegold. *Database Research at CWI*. SAP AG, T-REX Group, Walldorf, Germany, April 2004. Invited Talk.
- [12] S. Manegold. *The Impact of Modern Hardware Developments on Database Performance – or – The (Fairy) Tale of “Random Access” Memory*. University of Konstanz, Department of Computer & Information Science, Konstanz, Germany, August 2003. Invited Talk.
- [13] S. Manegold. *The Impact of Modern Hardware Developments on Database Performance – or – The (Fairy) Tale of “Random Access” Memory*. Aalborg University, Department of Computer Science, Aalborg, Denmark, July 2003. Invited Talk.
- [14] S. Manegold. *A Generic Cost Model for Parallel Database Systems*. CWI, Amsterdam, The Netherlands, August 1997. Invited Talk.
- [15] S. Manegold. *Nested Transactions in Objectbases*. Humboldt-Universität zu Berlin, Institut für Informatik, Berlin, Germany, October 1995. Invited Talk.

Courses

- [1] S. Manegold and M. L. Kersten. *Advanced Database Techniques*. Universiteit van Amsterdam, Amsterdam, The Netherlands, autumn 2006–. Course (Master CS).
- [2] P. A. Boncz, S. Manegold, and M. L. Kersten. *Database Techniques*. Universiteit van Amsterdam, Amsterdam, The Netherlands, spring 2004–. Course (Bachelor CS).