

Philippe Bonnet

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Current Position

Associate Professor, Computer Science, IT University of Copenhagen

Professional Experience

IT University of Copenhagen: 2009 -

University of Copenhagen, Computer Science Department: 2001-2009
(3 months of parental leave in 2005 and 3 months in 2007)

Cornell University, Computer Science Department: 1999-2001

GIE Dyade Bull-INRIA (Grenoble, France): 1996-1999

European Computer-industry Research Center (Munich, Germany): 1993-1996

Education

PhD Computer Science, Universite Savoie Grenoble, France, 1999.

M.Sc Computer Science, INSA Lyon, France, 1995.

Engineer Degree Computer Science, INSA Lyon, France, 1993.

Awards

Best Paper Award, CIDR 2009

Greatest Achievement Award, TinyOS Technology Exchange 2006

PhD Students Supervised

Joel Granados, ITU (2009-2013)

Aslak Johansen, ITU (2010-2013)

Marti Minoves, ITU (2011-2014)

Marcus Chang, DIKU (2007-2010): postdoc at Johns Hopkins University

Martin Leopold, DIKU (2005-2008): engineer at Nokia

Christoffer Hall Fredericksen, DIKU (2003-2007): engineer at MySQL AB

Research Funding

PI EU FP7 (300 K EUR, 2011-2015): INTERACT - International Network for Terrestrial Research and Monitoring in the Arctic

PM Danish Strategic Research Council (4.9 M DKK, 2008-2013): MANA - Monitoring remote environments with Autonomous sensor Network-based data Acquisition systems (<http://www.itu.dk/mana>)

PI Danish Research Agency, special program on IT (2 M DKK, 2003-2007): Hogthrob - A Sensor network infrastructure for Sow Monitoring

PI EU FP6 (50 K EUR, 2006-2008): Participation in CRUISE - Network of Excellence on Sensor Networks.

PI EU FP6 (50 K EUR, 2005-2006): Participation in Embedded Wisents - Coordination Action on Sensor Networks

PM Danish CIT (2 M DKK, 2003-2007): Badger - Database Performance on Modern Computer Architectures (with MySQL AB)

Co-PI DARPA Sensit (500 K USD, 1999-2001): Cougar Project - Adapting database technology to provide flexible decision support over sensor networks. (with Praveen Seshadri)

Co-PI NSF, AF Rome Labs (50 K USD, 1999-2000): Jaguar - Java-based portable query processing. (with Praveen Seshadri)

PI Microsoft Research Grant awarded by Jim Gray (50 K USD, 2000) to support the PREDATOR system, a public-domain object-relational database system developed by Praveen Seshadri.

Professional Services

Area Editor, Information Systems, 2010-

Associate Editor, ACM Transactions on Sensor Networks, 2003-2010

Chair of ACM Sensys steering committee 2008-2009

Repeatability and Workability chair, Sigmod 2011

PhD Workshop chair, VLDB 2011

PC co-chair Sensys 2006, Secon 2005

Demo chair Sigmod 2008

Area chair (sensor networks), ICDE 2008

Publications

41 publications including 1 book, 2 book chapters, 7 journal papers, and 32 peer reviewed publications in conferences and workshops.

H-index: 14, G-index: 35

List of Publications

Books

1. Database Tuning: Principles, Experiments and Troubleshooting Techniques. Dennis Shasha and Philippe Bonnet. Morgan Kaufmann 2002.

Book Chapters

2. Database Tuning. Dennis Shasha and Philippe Bonnet. (chapters in Database Encyclopedia, Springer Verlag). 2009.
3. Tuning Database Design for High Performance. Dennis Shasha and Philippe Bonnet. (chapter in Computer Science and Engineering Handbook, 2nd Edition). CRC Press. 2003

Journals

4. Matias Bjørling, Philippe Bonnet, Luc Bouganim and Bjorn Jonsson. uFlip: Understanding the Energy Consumption of Flash Devices. IEEE Data Engineering Bulletin, December 2010.
5. Philippe Bonnet and Marcus Chang. Monitoring in a High-Arctic Environment. IEEE Pervasive Computing. December 2010.
6. Boris Jan Bonfils, Philippe Bonnet: Adaptive and Decentralized Operator Placement for In-Network Query Processing. Telecommunication Systems 26(2-4): 389-409 (2004)
7. Philippe Bonnet, Allan Beaufour, Mads Bondo Dydensborg, Martin Leopold: Bluetooth-based sensor networks. SIGMOD Record 32(4): 35-40 (2003)
8. Dennis Shasha, Philippe Bonnet. Smooth-Talking Your Database. Dr Dobbs. June 2002.
9. Philippe Bonnet, Johannes Gehrke, Praveen Seshadri. Querying the Physical World. IEEE Personal Communications. October 2000.
10. Laurent Amsaleg , Philippe Bonnet, Mike Franklin , Anthony Tomasic and Tolga Uhan. Improving Responsiveness for Wide-Area Data Access. IEEE Data Engineering Bulletin, September, 1997.

Conferences and Workshops

11. David Koop, Emanuele Santos, Phillip Mates, Huy T. Vo, Philippe Bonnet, Bela Bauer, Brigitte Surer, Matthias Troyer, Dean N. Williams, Joel E. Tohline, Juliana Freire, Claudio T. Silva. A Provenance-Based Infrastructure for Creating Executable Papers. ICCS 2011. (finalist contender for Elsevier's executable paper grand challenge).
12. Philippe Bonnet, Luc Bouganim. Flash Device Support for Database Management. CIDR 2011.
13. Marcus Chang, Philippe Bonnet. Meeting Ecologists Requirements with Adaptive Data Acquisition. 8th ACM Conference on Sensor Networks (Sensys) 2010.
14. Matias Bjørling, Lionel Le Folgoc, Ahmed Mseddi, Philippe Bonnet, Luc Bouganim, Björn Jonsson. Performing sound flash device measurements: some lessons from uFLIP. SIGMOD Conference 2010 (demonstration)
15. Marcus Chang, Andreas Terzis, Philippe Bonnet. Mote-based Anomaly Detection with Echo State Networks. DCOSS 2009.
16. Luc Bouganim, Bjorn Jonsson, Philippe Bonnet. uFlip: Understanding Flash IO Patterns. CIDR 2009. (best paper award)

17. Marcus Chang, Cecile Cornou, Klaus Madsen, Philippe Bonnet: Lessons from the Hogthrob Deployments. WiDeploy 2008.
18. Martin Leopold, Marcus Chang, Philippe Bonnet. Characterizing Mote Performance: A Vector-Based Approach. EWSN 2008.
19. Philippe Bonnet and Marcus Chang. Towards autonomous in-situ data acquisition with wireless sensor networks. Session on Instrumentation related to polar regions and the IPY. EGU General Assembly 2007.
20. Philippe Bonnet, Martin Leopold, K. Madsen: Hogthrob: towards a sensor network infrastructure for sow monitoring (wireless sensor network special day). DATE 2006.
21. Kashif Virk, Jan Madsen, Andreas Vad Lorentzen, Martin Leopold, Philippe Bonnet: Design of A Development Platform for HW/SW Codesign of Wireless Integrated Sensor Nodes. DSD 2005
22. Michael Samuel, Anders Uhl Pedersen, Philippe Bonnet: Making CSB+-Tree Processor Conscious. DaMoN 2005
23. Christoffer Hall, Philippe Bonnet: Getting Priorities Straight: Improving Linux Support for Database I/O. VLDB 2005
24. Allan Beaufour, Philippe Bonnet: Personal Servers as Digital Keys. PerCom 2004
25. Martin Leopold, Mads Dydensborg, Philippe Bonnet. Bluetooth and Sensor Networks: A Reality Check. 1st ACM Conference on Sensor Networks (Sensys) 2003.
26. Tobias Mayr, Philippe Bonnet, Johannes Gehrke and Praveen Seshadri. Leveraging Heterogeneous Resources for Parallel Query Processing. IEEE Symposium on Cluster Computing and the Grid, May, 2003.
27. Boris Bonfils and Philippe Bonnet. Decentralized and Adaptive Operator Placement for In-Network Query Processing. 2nd Workshop on Information Processing in Sensor Networks, April, 2003.
28. Allan Beaufour, Martin Leopold and Philippe Bonnet. Smart-Tag Based Data Dissemination. 1st ACM Workshop on Wireless Sensor Network Applications, September, 2002.
29. Dennis Shasha, Philippe Bonnet. Database Tuning: Principles, Experiments and Troubleshooting Techniques (tutorial). SIGMOD 2002, VLDB 2002, National Chinese Database Conference 2002.
30. Philippe Bonnet. Going Public: Open-Source Databases and Database Research (panel). SIGMOD 2002.
31. Tony Faradjian, Johannes Gehrke, Philippe Bonnet. GADT: A Gaussian Abstract Data Type for Querying the Physical World. International Conference on Data Engineering. 2002.
32. Philippe Bonnet. A Database Perspective on Sensor Networks (tutorial). 2nd International Conference on Mobile Data Management. Hong Kong, January 2001.
33. Philippe Bonnet, Johannes Gehrke, Praveen Seshadri. Towards Sensor Database Systems. 2nd International Conference on Mobile Data Management. Hong Kong, January 2001.
34. Philippe Bonnet, Praveen Seshadri. Device Database Systems. ICDE (poster presentation). San Diego, 2000.
35. Philippe Bonnet and Anthony Tomasic. Parachute Queries in the Presence of Unavailable Data Sources. BDA'98. Hammameth, Tunisia, October, 1998.
36. Philippe Bonnet, Anthony Tomasic: Partial Answers for Unavailable Data Sources. FQAS 1998.

37. Anthony Tomasic, Rémy Amouroux, Philippe Bonnet, Olga Kapitskaia, Hubert Naacke, Louiqa Raschid: The Distributed Information Search Component (Disco) and the World Wide Web. SIGMOD Conference 1997 (demonstration).
38. Philippe Bonnet and Stephane Bressan. Extraction and Integration of Data from Semi-structured Documents into Business Applications. Industrial Applications of Prolog (INAP-97), Kobe, Japan, October, 1997.
39. Philippe Bonnet, Stephane Bressan, Lone Leth, and Bent.Thomsen. Towards ECLIPSE Agents on the Internet. 1st Workshop on Logic Programming Tools for INTERNET Applications, 1996.
40. Stephane Bressan and Philippe Bonnet. The ECLiPSe HTTP-Library, Symposium on Industrial Applications of Prolog (INAP-96).
41. Philippe Bonnet, Stephane Bressan and Boris Granveaud. The World Travel Editor: A Geographic Search Engine for the INTERNET', EDBT Demos and Posters, March, 1996.

Last updated: March 1, 2011