

## Publications and Citations

Rolland Vida, PhD

### NOTE:

Until May 2017, I have published nearly 80 scientific research papers (as listed below) for which there are over 1300 independent citations listed by Google Scholar. My h-index is 13, my i10-index is 14.

### PH.D. THESIS:

„Protocol Design for Group and Mobility Management in a Multicast Environment”,  
Université Pierre et Marie Curie, Paris VI, Laboratoire LIP6 – CNRS.  
*Advisor:* Prof. Serge FDIDA  
*Public defense:* 2002. December 13.  
*Mention:* with the highest honors (très honorable).

### BOOK CHAPTERS:

Peter Laborczi, Attila Török, Miklos Mate, **Rolland Vida**, „Routing and information spreading in ITS networks”, in „Wireless Technologies for Intelligent Transportation Systems”, Nova Science Publishers, 2010.

**Rolland Vida**, Attila Vidács, „Mobility in Wireless Sensor Networks”, in Yan Zhang, Laurence T. Yang, Jiming Chen, „RFID and Sensor Networks”, Auerbach Publications, CRC Press, Taylor & Francis Group, 2009, pages 379-408.

G. Cizault (collective pen-name of the authors), „Protocoles réseau et transport”, in „IPv6, théorie et pratique”, Third Edition, O'Reilly Publishers ISBN 2-84177-139-3, Paris, 2002, pages: 31-65.

B. Baurens, L. Costa, A. Dracinschi, S. Fdida, V. Roca, **Rolland Vida**, „Chapter 6. Communications”, in K. Drira, A. Martelli and T. Villemur, „Cooperative Environments for Distributed Systems Engineering”, Lecture Notes in Computer Science 2236, Springer-Verlag, ISBN 3-540-43083-0, Berlin, 2002, pages: 153-176.

### JOURNAL PAPERS:

Gergely Öllös, **Rolland Vida**, Adaptive Multiresolution Sampling in Event-driven WSNs, *Telecommunication Systems*, 61:(2), 2016, pp. 337-347.

Gergely Öllös, **Rolland Vida**, „Event Signature Extraction and Traffic Modeling in WSNs., *Telecommunication Systems*, Springer, accepted for publication, 2012.

Miklós Máté, **Rolland Vida**, Attila Mihaly, „The effect of incomplete sessions on peer-to-peer video on demand”, *Telecommunication Systems*, Springer, accepted for publication, 2012.

András Kalmár, Gergely Öllös, **Rolland Vida**, „Analysis of an Event Forecasting Method for Wireless Sensor Networks”, *Acta Universitatis Sapientiae – Electrical and Mechanical Engineering*, accepted for publication, January 2012.

Gergely Ollos, **Rolland Vida**, „Mobile Sleep Scheduling Protocol in Wireless Sensor Networks”, *Infocommunications Journal*, August 2010.

Miklos Mate, **Rolland Vida**, „Reliable Gossiping in Inter Vehicle Communication”, *Infocommunications Journal*, 2009/01.

Máté Miklós, **Vida Rolland**, „Forgalmi információk terjesztése korlátozott elárasztáson alapuló eljárással”, *Híradástechnika*, vol. LXIII, 2008/09.

Máté Miklós, **Vida Rolland**, „Kommunikációs megoldások közlekedési információk terjesztésére járművek közötti hálózatokban”, *Híradástechnika*, vol. LXIII, 2008/09.

Balázs Kovács, **Rolland Vida**, “Long-Range CAN: to Enhance the Performance of Content-Addressable Networks”, *International Journal on Advances in Networks and Services, IARIA Journals*, vol. 1, no, 1, 2008.

**Vida Rolland**, Cinkler Tibor, „Hálózati helyzetkép”, *Híradástechnika*, vol. LXIII, 2008/08.

Zoltán Vincze, Dorottya Vass, **Rolland Vida**, Attila Vidács, Andras Telcs, „Adaptive Sink Mobility in Event-driven Densely Deployed Wireless Sensor Networks”, *Ad Hoc and Sensor Wireless Networks*, OCP Science, Vol. 3/2-3, 2007, ISSN 1551-9899, pp.255-284.

Cinkler Tibor, **Vida Rolland**, „Hálózati technológiák fejlődése”, *Magyar Tudomány*, June 2007.

Balazs Kovacs, **Rolland Vida**: „Hierarchical, Multi-spanning Architecture for Managed Wireless Networks”, accepted for publication (October 2006), *International Journal of Wireless and Mobile Computing (IJWMC), Special Issue on Issues and Challenges in Wireless Communications and Networks*, InderScience Publishers, ISSN 1741-1084.

**Rolland Vida**, Karoly Farkas, Dan Grigoras, Utz Roedig, Jorge sa Silva, Petia Todorova, Andreas Pitsillides, Vassos Vassiliou, Lars Wolf, “Mobile and Ambient Environments of the Future: Research Challenges for Wireless Ad-Hoc and Sensor Networks”, *China Communications Journal*, vol. 3(3), June 2006, ISSN 1673-5447, pp. 99-106.

Vincze Zoltán, **Vida Rolland**, „Mobil szenzorok alkalmazása szenzorhálózatokban”, *Híradástechnika*, vol. LXI(12), December 2006, HU ISSN 0018-2028, pp. 12-17.

Dorottya Vass, Zoltán Vincze, **Rolland Vida**, Attila Vidács, "Energy Efficiency in Wireless Sensor Networks Using Mobile Base Station", *EUNICE 2005: Networks and Applications Towards a Ubiquitously Connected World*, IFIP International Federation for Information Processing Series, vol. 196, (C. Delgado Kloos, A. Marín, D. Larrabeiti (Eds.)), 2006, XIV, ISBN 0-387-30815-6.

Biczok Gergely, Egi Norbert, Fodor Peter, Kovacs Balazs, **Vida Rolland**, "Alternatív megoldások skálázható útválasztásra mobil környezetben”, *Híradástechnika*, vol. LIX(9), September 2004, HU ISSN 0018-2028, pp. 26-31.

Gergely Biczók, Norbert Égi, Péter Fodor, Balázs Kovács, **Rolland Vida**: “Scalable Addressing and Routing in Large Scale Wireless Networks”, *Production Systems and Information Engineering*, vol. 2 (2004), HU ISSN 1785-1270, pp. 143-158.

**Rolland Vida**, Luis Costa, and S. Fdida, "Mobile Hop-by-Hop Multicast Routing", *Computer Networks*, Elsevier, vol. 44(6), April 2004, pp. 789-812. Impact factor (2007): 0.63.

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#### CONFERENCE PROCEEDINGS:

Andras Kalmar, **Rolland Vida**, Markosz Maliosz, “CAEsAR: A Context-Aware Addressing and Routing Scheme for RPL Networks”, in *IEEE International Conference on Communications (ICC)*, London, UK, 2015, pp. 635-641.

Budai MC, Lengyel A, Vajda L, Vidacs A, **Vida R**, Simek M, Monitoring Health Status of Relatives - "The Smoke in the Chimney" Approach, in 38th International Conference on Telecommunications and Signal Processing: TSP 2015, Prague, pp. 601-606.

Máté Miklós, **Vida Rolland**, "Assessing the Efficiency of a P2P Video Client", ACTA UNIVERSITATIS SAPIENTIAE ELECTRICAL AND MECHANICAL ENGINEERING, 7: pp. 36-61. (2015).

G. Öllös, **R. Vida**, "Signature Extraction for Event Forecasting in Wireless Sensor Networks", in Proceedings of Networks 2012 – 15th International Telecommunication Networks Strategy and Planning Symposium, Rome, Italy, October 2012.

M. Máté, **R. Vida**, A. Császár, A. Mihály, „Offloading Video Servers: P2P and/or Caches?“, in Proceedings of Networks 2012 – 15th International Telecommunication Networks Strategy and Planning Symposium, Rome, Italy, October 2012.

Csaba Simon, Felicián Németh, Ferenc Uzsák, Gábor Rétvári, Ferenc Ficsor, **Rolland Vida**, „Autonomic DHCPv6 Architecture“, in Proc. of 3rd IEEE GLOBECOM Workshop on Management of Emerging Networks and Services: MENS 2011. Houston, USA, December 2011.

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Gabor Vincze, Zoltan Novak, Zoltan Pap, **Rolland Vida**, "RESERV: A Distributed, Load-Balanced Information System for Grid Applications", *GP2PC'08, 8th International Workshop on Global and Peer-to-Peer Computing*, May 19-22, 2008, Lyon, France.

Zoltan Vincze, **Rolland Vida**, Attila Vidács "On the Efficiency of Local Information-based Sink Deployment in Heterogeneous Environments", in *Proceedings of 2nd Int. Workshop on Performance Control in Wireless Sensor Networks (PWSN)*, Austin, Texas, October 2007.

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Miklos Mate, **Rolland Vida**, "Calculating the Coverage Area of an Ad Hoc Access Network", in *Proceedings of Transom 2007, 7th European Conference Of Young Research and Science Workers in Transport and Telecommunications*, Zilina, Slovakia, June 2007.

Attila Vidács, **Rolland Vida**, Zoltan Vincze. "Efficient Information Dissemination in Wireless Sensor Networks using Mobile Sinks", in *Proceedings of Information Systems Technology Panel Symposium (IST-062/RSY-016) on Dynamic Communications Management (NATO/PfP)*, Budapest, Hungary, October 2006.

Zoltan Vincze, Dorottya Vass, **Rolland Vida**, Attila Vidács, "Adaptive Sink Mobility in Event-driven Clustered Single-hop Wireless Sensor Networks", in *Proceedings of the 6th International Network Conference (INC 2006)*, Plymouth, UK, July 2006, pp. 315-322.

Zoltan Vincze, Dorottya Vass, **Rolland Vida**, Attila Vidács, Andras Telcs, "Adaptive Sink Mobility in Event-driven Multi-hop Wireless Sensor Networks", in *Proceedings of the 1st International Conference on Integrated Internet Ad hoc and Sensor Networks (InterSense)*, Nice, France, ACM Press, ISBN 1-59593-427-8, May 2006 **(Best Paper Award)**.

Zoltan Vincze, Kristof Fodor, **Rolland Vida**, Attila Vidács, "Electrostatic Modeling of Multiple Mobile Sinks in Wireless Sensor Networks", in *Proceedings of IFIP Networking Workshop on Performance Control in Wireless Sensor Networks*, Coimbra, Portugal, May 2006, pp. 30-37.

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Attila Török, Lorant Vajda, Attila Vidács, **Rolland Vida**, "Techniques to Improve Scheduling Performance in IEEE 802.15.3 based Ad hoc Networks", in *Proceedings of IEEE Global Telecommunications Conference (IEEE GLOBECOM)*, vol. 6, Saint Louis, Missouri, USA, ISBN 0-7803-9414-3, November - December 2005, pp. 3523-3528.

Zoltan Vincze, **Rolland Vida**, „Multi-hop wireless sensor networks with mobile sink”, in *Proceedings of the 2005 ACM Conference on Emerging Networking Experiments and Technologies (CoNext 2005)*, Toulouse, France, ACM Press, October 2005, pp. 302-303.

Gergely Biczók, **Rolland Vida**, “On Faster and Fair Lookup Operation in Content-Addressable Networks”, in *Proceedings of the 2005 ACM Conference on Emerging Networking Experiments and Technologies (CoNext 2005)*, Toulouse, France, ACM Press, October 2005, pp. 226-227.

**Rolland Vida**, Attila Vidács, "A Survey on Energy Efficient Communication Schemes in Wireless Sensor Networks", *Kommunikáció 2005*, Budapest, Hungary, October 2005, pp. 391-399.

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**Rolland Vida**, Luis Costa, and Serge Fdida, "M-HBH - Efficient Mobility Management in Multicast", in *Proceedings of NGC'02, Fourth International Workshop on Networked Group Communication*, Boston, MA, USA, ACM Press, October 2002, ISBN 1-58113-619-6, pp. 105-112.

**Rolland Vida**, Luis Costa, and Serge Fdida, "Mobility and Multicast: Protocol Design and Analysis", in *Proceedings of ISCIS XVII, Seventeenth International Symposium on Computer and Information Sciences, Special Session on New Issues in Networking*, Orlando, FL, USA, CRC Press, October 2002, ISBN 0-8493-1490-9, pp. 372-376.

Michel Diaz, Stéphane Owezarski, Roberto Canonico, Luis Costa, Serge Fdida, **Rolland Vida**, David Hutchison, Laurent Mathy, Andreas Meissner, and Lars Wolf, "GCAP: A New Multimedia Multicast Architecture for QoS", in *Proceedings of PROMS 2001, 6th International Conference on Protocols for Multimedia Systems*, Enschede, The Netherlands, Lecture Notes in Computer Science 2213, Springer-Verlag, October 2001, ISBN 3-540-42708-2, pp. 103-115.

#### **INTERNATIONAL STANDARDS:**

**Rolland Vida** and Luis Costa, "Multicast Listener Discovery Version 2 (MLDv2) for IPv6", *Internet Engineering Task Force (IETF), RFC 3810*, June 2004. 62 pages.

#### **TECHNICAL REPORT, PROJECT DELIVERABLE, PREPRINT:**

Carol Gine, Christophe Janneteau, Thorsten Lohmar, Paolo Casagrande, Pierrick Seite, Csaba Simon, Ralf Tönjes, Yu Ming Tian, **Rolland Vida**, Nadeem Akhtar, Thierry Levesque, Klaus Moessner, „Concepts for Mobile Multicast in Hybrid Networks”, EU IST FP5 OverDRiVE project Public Deliverable, WP2/D09, 2003, pp. 1-125.

**Rolland Vida**, Luis Costa, Serge Fdida, Roberto Canonico, Laurent Mathy, David Hutchinson, „Specification of a Multicast Monomedia Protocol”, EU FP5 Project IST-1999-10 504 GCAP, Global Communication Architecture and Protocols for new QoS services over IPv6 networks, Public Deliverable, 2001.

Vincent Roca, Luis Costa, **Rolland Vida**, Anca Dracinschi, and Fdida Serge, "A Survey of Multicast Technologies", *Technical Report RP-LIP6-2000-09-05*, September 2000.

**Rolland Vida** and Adrian Sergiu Darabant: "Current Technologies for QoS and Traffic Control", *Babes-Bolyai University, Faculty of Mathematics and Computer Science Research Seminars, Seminar on Computer Science, Preprint*, no. 2, 1998.

Adrian Sergiu Darabant and **Rolland Vida**: "Improving Transaction Support for Dynamic Information Retrieval Systems", *Babes-Bolyai University, Faculty of Mathematics and Computer Science Research Seminars, Seminar on Computer Science, Preprint*, no. 2, 1998.

**Rolland Vida**, "A Visual Basic Solution for Computer Assisted Scheduling", *Babes-Bolyai University, Faculty of Mathematics and Computer Science Research Seminars, Seminar on Computer Science, Preprint*, no. 2, 1997, pp. 89-96.

**Rolland Vida** et al., "The OSPF Simulator", *Babes-Bolyai University, Faculty of Mathematics and Computer Science Research Seminars, Seminar on Computer Science, Preprint*, no. 2, 1996, pp. 213-216.