Sándor Laki - Curriculum Vitae

PERSONAL DATA	*Name:* LAKI, Sándor *Nationality:* Hungarian *Date of birth:* April 15, 1983

CONTACT	Dept. of Information Systems Eötvös Loránd University (ELTE) Budapest, Hungary H-1117	*Phone:* +3613722869 / 8477 *Cell:* +36703742646 *E-mail:* lakis@inf.elte.hu *WWW:* http://lakis.web.elte.hu

RESEARCH INTERESTS

Data analytics and modelling, computer networks, network measurements, cloud technologies, data transportation, IP geolocation, peer-to-peer networks, software defined networking.

EDUCATION

Faculty of Informatics, Eötvös Loránd University   **2015**
Ph.D. School of Computer Science, Budapest, Hungary

> Ph.D. thesis: Analysis of complex communication networks: from measurement control to optimization
> doi: 10.15476/ELTE.2015.061
> Date of Ph.D. defense: 17/06/2015

Faculty of Informatics, Eötvös Loránd University   **2002-2007**
Budapest, Hungary

> M.Sc. in Computer Science, 2007

RELEVANT EXPERIENCE

Computational Sciences Research Group,
Wigner Research Centre for Physiscs,
Hungarian Academy of Sciences, Budapest, Hungary
Researcher   **April 2014-**

Dept. of Information Systems,
Eötvös Loránd University, Budapest, Hungary
Research Assistant   **Sept. 2010-**

AWARDS

Young Researcher Award, Faculty of Informatics, Eötvös Loránd University   **2011**

TEACHING EXPERIENCE

Eötvös Loránd University

Computer Networks - Lecture and Practice [English]	**2012-**
Computer Networks - Practice [Hungarian]	**2007-**
Programming languages I. (ADA95) [Hungarian]	**2004-2008**

Pázmány Péter Catholic University

Introduction to programming II. (C++) [Hungarian]	**2007**
Programming languages and methods (Java) [Hungarian]	**2006**
Introduction to programming I. (C++) [Hungarian]	**2006-2007**

RESEARCH	NATIONAL PROJECTS

RESEARCH

NATIONAL PROJECTS

NKFP 02/032/2004, NAP 2005/KCKHA005, TAMOP 4.2.1/B-09/1/KMR-2010-0003, EITKIC-12-1-2012-0001, TÁMOP-4.2.2.C-11/1/KONV-2012-0001 (Hungarian Future Internet Project), joint projects with Ericsson Research Hungary.

INTERNATIONAL PROJECTS

EU FP7 OneLab2, EU FP7 NOVI (2010-2013), EU FP7 OpenLab (2011-2014), EIT ICTLabs Smart Ubiquitous Content (2013), EIT ICTLabs FITTING (2013), EU FP7 XIFI (FIWARE Lab cloud infrastructure; 2014-2015), EU H2020 COMPARE (Big data platform for genetic data; 2015-2019)

SERVICES AND OTHER ACTIVITIES

CONFERENCE

IEEE CloudCom 2015
Reviewer **2015**
Big Data Workshop, 7th CyberC Conference '15
Reviewer **2015**
27th International Teletraffic Congress (ITC) '15
Reviewer **2015**
IEEE Symposium on Computer Applications and Industrial Electronics (ISCAIE) 2014
Reviewer **2013**
IEEE Symposium on Computers and Informatics (ISCI) 2013
Reviewer **2013**
IEEE Symposium on Wireless Technology and Applications (ISWTA) 2012
Reviewer **2012**
Military Communications Conference (MILCOM) 2012
Reviewer **2012**

JOURNAL

IEEE Communication Letters
Reviewer **2014**
IEEE Systems Journal
Reviewer **2014**
IEEE Journal on Selected Areas of Communication
Reviewer **2011**

LANGUAGE SKILLS

Hungarian: Fluent
German: Basic
English: Fluent

PUBLICATIONS

BOOK CHAPTER

- J. Stéger, S. Laki, P. Mátray: "A Monitoring Framework for Federated Virtualized Infrastructures", In Book entitled "Measurement Methodology and Tools" (Editors: Lluis-Fabrega, Pere Vila, Davide Careglio, Dimitri Papadimitriou), Springer Lecture Notes in Computer Science (LNCS), vol. 7586, Aug. 2013, doi: 10.1007/978-3-642-41296-7_11

JOURNAL PAPERS

- V. Maglaris, C. Papagianni, G. Androulidakis, M. Grammatikou, P. Grosso, J. van der Ham, C. de Laat, B. Pietrzak, B. Belter, J. Steger, S. Laki, M. Campanella, and S. Sallent: "Toward a Holistic Federated Future Internet Experimentation Environment: The Experience of NOVI Research and Experimentation", IEEE Communications Magazine, vol. 53, issue 7, July 2015, 9 pages, ISSN:0163-6804, IMPACT FACTOR: 4.46, doi: 10.1109/MCOM.2015.7158277

- J. van der Ham, J. Steger, S. Laki, Y. Kryftis, V. Maglaris, C. de Laat: "The NOVI Information Models", Future Generation Computer Systems, vol. 42, January 2015, pages 64-73, Elsevier, ISSN:0167-739X, IMPACT FACTOR: 2.639, doi: 10.1016/j.future.2013.12.017

- B. Hullar, S. Laki, A. György: "Efficient Methods for Early Protocol Identification", IEEE Journal on Selected Areas in Communications (JSAC) - 2014 Special Issue on Deep Packet Inspection: Algorithms, Hardware, and Applications., vol. 32, issue 10, October 2014, 12 pages, ISSN:0733-8716, IMPACT FACTOR: 4.138, doi: 10.1109/JSAC.2014.2358832

- P. Mátray, P. Hága, S. Laki, G. Vattay, I. Csabai: "On the Spatial Properties of Internet Routes", Computer Networks, Volume 56, Issue 9, 14 June 2012, Pages 2237-2248, ISSN 1389-1286, IMPACT FACTOR: 1.176, doi:10.1016/j.comnet.2012.03.005.

- Zs. Kallus, P. Hága, S. Laki,P. Mátray, G. Vattay: "Complex Geography of the Internet Network", Acta Physica Polonica B, Volume 42, No. 5, May 2011, Pages 1057-1069 ,ISSN 0587-4254, IMPACT FACTOR: 0.664, doi:10.5506/APhysPolB.42.1057

- S. Laki, P. Mátray, P. Hága, I. Csabai, G. Vattay: "A Model Based Approach for Improving Router Geolocation", Computer Networks, Volume 54, Issue 9, 17 June 2010, Pages 1490-1501, ISSN 1389-1286, IMPACT FACTOR: 1.201, doi: 10.1016/j.comnet.2009.12.004.

- I. Csabai, A. Fekete, P. Hága, B. Hullár, G. Kurucz, S. Laki, P. Mátray, J. Stéger, G. Vattay: "ETOMIC advanced network monitoring system for future Internet experimentation", Infocommunications Journal, Invited paper, Volume LXV, Issue I, Pages 25-31

CONFERENCE PAPERS
- J. Stéger, T. Sebők, Zs. Kallus, S. Laki, P. Mátray, J. Szüle, L. Dobos, I. Csabai, G. Vattay: "Network Measurement Virtual Observatory: An Integrated Database Environment for Internet Research and Experimentation", In Proceedings of TRIDENTCOM 2014 Conference, May 5-7, 2014, Guangzhou, China

- A. Puszta, J. Szüle, S. Laki: "Near Real-Time Thematic Clustering of Web Documents and other Internet contents", In Proceedings of the 4th IEEE Intl' Conference on Cognitive Infocommunications, December 02-05, 2013, Budapest, Hungary

- T. Matuszka, Z. Vincellér, S. Laki: "On a Keyword-Lifecycle Model for Real-time Event Detection in Social Network Data", In Proceedings of the 4th IEEE Intl' Conference on Cognitive Infocommunications, December 02-05, 2013, Budapest, Hungary

- R. Szabo, K. Farkas, M. Ispany, A.A. Benczur, N. Batfai, P. Jeszenszky, S. Laki, A. Vagner, L. Kollar, Cs. Sidlo, R. Besenczi, M. Smajda, G. Kover, T. Szincsak, T. Kadek, M. Kosa, A. Adamko, I. Lendak, B. Wiandt, T. Tomas, A. Zs. Nagy, G. Feher: "Framework for smart city applications based on participatory sensing", In Proceedings of the 4th IEEE Intl' Conference on Cognitive Infocommunications, December 02-05, 2013, Budapest, Hungary

- S. Laki, T. Lukovszki: "On a Balanced Neighbor Selection Strategy for Tracker-Based Peer-to-Peer Networks", In Proceedings of the 13th IEEE International Conference on Peer-to-Peer Computing (IEEE P2P'13), September 9-11, 2013, Trento, Italy (Acceptance rate: 30.8%)

- S. Laki, T. Lukovszki: "Balanced Neighbor Selection for BitTorrent-like Networks", In Proceedings of the 21st European Symposium on Algorithms (ESA 2013), September 02-04, 2013, Sophia Antipolis, France, Springer LNCS vol. 8125 (Acceptance rate: 21.6%)

- B. Hullár, S. Laki, A. György: "Early Identification of Peer-To-Peer Traffic", In Proceedings of IEEE ICC 2011, June 5-9, 2011, Kyoto, Japan

- B. Hullár, S. Laki, J. Stéger, I. Csabai, G. Vattay: "SONoMA: A Service Oriented Network Measurement Architecture", In Proceedings of TridentCom 2011, April 17-19, 2011, Shanghai, China

- S. Laki, P. Mátray, P. Hága, T. Sebők, G. Vattay, I. Csabai: "Spotter: A Model Based Active Geolocation Service", In Proceedings of IEEE INFOCOM Conference 2011, April 10-15, 2011, Shanghai, China (Acceptance rate: 15.9%)

- P. Mátray, P. Hága, S. Laki, G. Vattay, I. Csabai: "On the Network Geography of the Internet", In Proceedings of IEEE INFOCOM Mini-Conf. 2011, April 10-15, 2011, Shanghai, China (Acceptance rate: 23.4%)

- I. Csabai, A. Fekete, P. Hága, B. Hullár, G. Kurucz, S. Laki, P. Mátray, J. Stéger, G. Vattay, F. Espina, S. Garcia-Jimenez, M. Izal, E. Magana, D. Morato, J. Aracil, F. Gomez, I. Gonzalez, S. Lopez-Buedo, V. Moreno, J. Ramos: "ETOMIC Advanced Network Monitoring System for Future Internet Experimentation", In Proceedings of TridentCom 2010 Conference, May 18-20, 2010, Berlin, Germany
- S. Laki, P. Mátray, P. Hága, I. Csabai, G. Vattay: "A Detailed Path-latency Model for Router Geolocation", In Proceedings of TridentCom 2009 Conference, Apr 6-8 2009, Washington D.C., USA, doi: 10.1109/TRIDENTCOM.2009.4976258

PRESENTATIONS

- Balanced Neighbor Selection for BitTorrent-Like Networks, 21th European Symposium on Algorithms (ESA 2013), September 2-4, 2013, Sophia Antipolis, France
- Analysing the spatial structure of the Internet topology, ISMA 2013 AIMS-5 - Workshop on Active Internet Measurements, February 6-8, 2013, San Diego, USA, CA
- Early Identification of Peer-to-Peer Traffic, IEEE ICC 2011 Conference, June 5-9, 2011, Kyoto, Japan
- Early Identification of Peer-to-Peer Traffic, Ericsson HSN Workshop, May 30, 2011, Budapest, Hungary
- Spotter: A Model Based Active Geolocation Service, IEEE INFOCOM 2011 Conference, April 10-15, 2011, Shanghai, China
- ETOMIC Advanced Network Monitoring System for Future Internet Experimentation, Tridentcom 2010 Conference - Technical session, May 18-20, 2010, Berlin, Germany
- Measurement Based Geolocation in the ETOMIC Infrastructure, High Speed Networking Workshop 2009, May 28-29, 2009, Balatonkenese, Hungary
- A Detailed Path-latency Model for Router Geolocation, Tridentcom 2009 Conference - ONIT 2009, April 6-8, 2009, Washington D.C., USA