Curriculum vitae

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Summary I am associate professor in data science in University of Turku, Finland, where I lead a recently established research group with two full-time PhD students and an active collaboration network. Our core research focus is in the theory and methods of modern data science, with the main applications in molecular life sciences and digital humanities. This research has yielded 60+ peer-reviewed publications including publications in Nature Communications and Nature Methods, and open research software with ~100k annual downloads. After completing the doctoral thesis in machine learning & bioinformatics in 2010, I acquired 7 years of international research experience before returning to Finland. I am regularly invited to give talks in academic as well as public events. Regarding academic outreach, I am board member in a data company owned by the City of Turku, and founding member and first coordinator of Open Knowledge Finland ry. which received the Open Science award from the Finnish Ministry of Education and Culture in 2017.

Academic Degrees

9/2015 Title of Docent (Applied Mathematics), University of Turku, Finland.
12/2010 Doctor of Science in Technology (Bioinformatics), Aalto University, Finland.
12/2003 Master of Science in Technology (Engineering Mathematics), Helsinki Univ. Technology, Finland.
7/2008 Bachelor of Science in Political Sciences (Practical Philosophy), University of Helsinki, Finland.

Current positions

8/2019- Associate Professor (Data Science). University of Turku. Department of Future Technologies.
6/2019- Board member and scientific advisor. Turku City Data Oy.
4/2017- Scientific advisor. Blueprint Genetics Co.

Relevant previous positions

9/2016-7/2019 (3 years) PI/Academy Research Fellow. University of Turku. Dpt. Mathematics and Statistics.
12/2015-8/2018 (2.5 years) Visiting scholar. VIB/KU Leuven, Belgium.
9/2012-8/2015 (3 years) Academy of Finland Postdoc. Wageningen University (The Netherlands).
3-12/2011 (9 months) Postdoc, Univ. Helsinki / FiDiPro & Microbial Food Safety Center of Excellence.
11/2010-1/2011 (3 months) Visiting scholar. European Bioinformatics Institute EBI, UK.
1/2006-2/2011 (5 years) Doctoral candidate. Information and Computer science, Aalto University, Finland. Adaptive Informatics Research Center of Excellence, Helsinki Institute for Information Technology HIIT.
9-12/2005 (4 months) Researcher. University of Helsinki, Finland. Dpt. Computer Science
9/2004-8/2005 (1 year) Researcher. Turku Center for Biotechnology, Finland (Civil service)
1/2003-6/2004 (1.5 years) Research assistant. Helsinki / TKK; Neural Networks Center of Excellence.
7/2002 (1.5 months) Summer trainee. Croatian Meteorological Institute, Zagreb, Croatia.
6/2001-8/2001 (3 months) Research trainee. CERN, Geneva, Switzerland.
9-10/2000 (2 months) Volunteering teacher. Dakshinayan, Bihar, India.

Research funding Total personal funding >1.5Me; as a member of research team ~1.3Me; incl. major personal grants 2016-2021 Academy of Finland Research Fellow (1.14Me); 2012-2015 Academy of Finland Postdoctoral Fellow (378 657e); 2012 Postdoc grant, Kordelin foundation (35 000e); 2006-2010; 2019-2020 SPARC grant, Government of India (60 000e; Co-PI; Led by Prof Richa Ashma). Major contributions as a team member (>1.3Me): incl. 2018-2022 CROSSYS, Academy of Finland; 2016-2019 COMHIS consortium, Academy of Finland; 2012-2013 Sitra New Democracy grant (Kansan muisti ry).

Research leadership and supervision PI in Academy of Finland Research Fellow & Postdoc projects. Leading a recently established research team in University of Turku (2 PhD students, 4 MSc students); co-supervisor for 2 postdocs and 4 PhD students. Two PhD students have graduated (I was the official instructor together with the supervising professor): Sudarshan Shetty (2019); Jose Caldas (2012), both with distinction; 7 graduated MSc students, now employed in Belgium, Finland, Sweden, UK, Portugal; 4/7 (>50%) MSc students continued to PhD studies. *Training:* EMBO Research Leadership (4 days; 11/2017) and VIB Leadership Program (4 days; 2/2017).

Teaching
9/2019 (4 days) microbiome bioinformatics intensive course organizer. Singapore.
5/2018 (3 days) bioinformatics summer school organizer, Wageningen University, The Netherlands;
9/2017 (3 days) numerical ecology summer school organizer, KU Leuven, Belgium;
10/2015 (2 weeks) bioinformatics intensive course co-organizer, Wageningen University, The Netherlands;
2015 Work group member designing Digital Humanities MSc module, University of Helsinki, Finland;
2005-2018 assistant in 4 annual university courses on bioinformatics. Aalto University, Finland; various academic lectures and workshops in Finland and abroad.

Organizing scientific meetings
12/2018 Computational Life Science seminar. Turku. Organizing committee. ~80 participants
12/2016 Conference on Philosophy and History of Open Science. Organizing committee; ~100 participants
3/2018 Digital Humanities in the Nordics. Program committee (Open Science chair). ~300 participants.
2008-2010 Finnish Bioinformatics Days (annual seminar). Organizing committee. ~50 participants annually.

Acknowledgements and awards
2019 Best paper award. Hill MJ *et al.* Digital Humanities in the Nordics conference.
2017 Open Science award. Ministry of Education and Culture. For Open Knowledge Finland Open Science work group, where I am founding member, first coordinator, and active contributor.
2015 Nature Communications paper in NCI's Epidemiology and Genomics Research Highlights
2013 Waterloo Institute for Complexity and Innovation Data Challenge 1000CAD
2011 Int'l Dupuytren award for Mosakhani et al., *Modern Pathol.*
2011-2014 6 Apps4Finland & 2 Datademo awards by HRI and Sitra for open data science projects
2005 Best poster award; Seminar of Systems Biology Research Program. Academy of Finland, Helsinki
2001 Professor E.J. Nyström stipend (1000e) excellence in mathematical studies, Espoo, Finland.

Publications
60+ peer-reviewed publications in machine learning, computational life sciences and digital humanities; 10+ open research software packages with ~100k annual downloads; reports, workshop papers, and outreach material. Scopus h-index 20; 2000+ citations.

Other academic merits
2005-2019 100+ invited and contributed presentations in 15+ countries; including video interviews
2019- DARIAH-EU Bibliographic Data work group member.
2019-2020 Digital humanities advisory panel (National Library of Finland)
2017-2019 European Conference Machine Learning & Knowledge Discovery. Program committee member.
2010-2018 Reviewed manuscripts for >30 scientific journals and conferences
2017-2018 Research support network member, developing open science policies in University of Turku.
2014-2019 Freedom of Information requests on academic journal prices, led to open data release by Ministry of Education and Culture, making Finland a leading country in the transparency of journal pricing.
2008-2018 Steering group member for: Digitalia (2015-2018); Data Elections Finland network for election analytics (2012-2013); MultiBio TEKES consortium (2008-2011).

Memberships and positions of trust in scientific societies
2019- Review Editor. Frontiers in Microbiology.
2018- Editorial board member. Versus journal, Finland.
2013-15 Founder & coordinator. Open Knowledge Finland ry. Open Science Work Group. Finland.
2010 Founder. Int'l rOpenGov network. Launched at NIPS Open Source workshop, US 2013.
2009-10 Board member, PR & vice president. Society for Bioinformatics. Finland.

For more information, publications and software, see the research homepage:
http://www.iki.fi/Leo.Lahti