

1. Ville Leppänen, date of CV: January 18, 2022. Orcid: 0000-0001-5296-677X

2. Education

PhD (Computer Science), 19.12.1996, University of Turku.

Title of Docent: Information Technology (Tietotekniikka), Univ. of Turku, May 2009.

3. Current position

Professor in Software Engineering and Software Security, Department of Computing, University of Turku, September 2016 – today. Current positions of trust:

- Vice dean (education), Faculty of Technology, Univ. of Turku, 1.1.2021 – 31.12.2024.
- Head of Software Engineering, Department of Computing (Univ. of Turku), 09/2011 – today.

4. Previous professional appointments

- Head of Department of Future Technologies (Univ. of Turku), 08/2019 – 12/2019.
- Vice Head of Department of Future Technologies (Univ. of Turku), 09/2017 – 07/2019.
- Professor (fixed term) in software engineering (total 4 years, 8 months; Univ. of Turku), 2012 – 2016.
- Professor (fixed term) in software engineering (total 3 years, 4 months; Univ. of Turku), 2002 – 2005.
- Lecturer (lehtori) in software engineering (total 8 years; Univ. of Turku), 1997 – 2002, 1/2006 – .
- Senior Assistant (yliassistentti, total 3 years; Univ. of Turku), 1997 – 2000.
- Assistant / research assistant / senior research fellow (Joensuu/Kuopio/Turku, 5 years) 1992–2000.
- Software developer, 1988 – 1991 in Wärtsilä Information Technologies Oy and Enator Oy.

5. Research, research funding, guidance and leadership

University leadership training programs I and II as student (Spring 2018, Spring 2019); assigned by Rector.

Received funding and leadership of projects, since 2015 (previous ones omitted):

- Subproject leader of IDA – Intimacy in Data-Driven Culture (Academy of Finland; 2019 – 2023; approx 300,000e).
- Leader of ICT Sote project (Ministry of Education; 825,000e, 2019-2021; life-long learning).
- Project leader of Fitech ICT (Min of Education; 10MEur, UTU's share 1MEur, 2019-2021; life-long learning).
- Local leader of AIF project (Allied ICT Finland; www.alliedict.fi), UTU's funding 460,000e, Business Finland, 2018 – 2020.
- Leader of 'Vali-Suomen ICT-muuntokoulutus' (SE and AI programs), 2018 – 2021; about 1,1MEur, Ministry of Education.
- Leader of Information and Cyber Security in Communication and Software Engineering -project; part of NSF co-center in Oulu; (Tekes, F-Secure and UTU funded), about 110.000e, 2017 – 2018.
- Site co-leader of BalticSatApps project, about 140.000e, 2018 – 2021, EU Interreg; partners from 5 countries.
- Leader of ICT Illusions, MATINE (Ministry of Defence) funded, funding about 100,000e, 2017.
- Co-leader of Geo-ICT project – a HEI ICI project for improving Geospatial and ICT capacities in Tanzanian Higher Education Institutions. Joint project with Department of Geography and Geology; approx 875.000e funding volume (funded by Department of Foreign Affairs in Finland; 03/2017 – 03/2020).
- Co-leader of GESEC (Geospatial business ecosystem in Tanzania) of Tekes' BEAM program. Joint project of Department of Geography and Geology (UTU, Niina Käyhkö) and Department of Information Technology; approx. 580,000e, 2016-2018.
- Leader of Challenge Finland Tekes funded project 'Kyberturvaa ohjelmistollisella diversifoinnilla' (2016; approx. 90.000 eur).
- Cyber Trust SHOK research program 03/2015 – 08/2017; Tekes funded; UTU site leader; 31 partners (13 large industry partners; 9 SME companies; 9 academic sites). The overall funding volume is about 25M eur. Univ. of Turku funding volume 875.000 eur. Academic leader of Work Package 4 (industrial co-leader is FSecure's Alexey Kirichenko; WP4 about 8MEur).

PhD thesis supervision: Currently supervising 6 PhD students (Jukka Ruohonen, Kalle Hjerppe, Sampsa Rauti, Jari-Matti Mäkelä, Tomi Juhola, Emma Nkonoki).

Previously I have been supervisor of Shohreh Hosseinzadeh (Software security, PhD, 2020), Kalle Rindell (Development of Secure Software, PhD 2019), Jurka Rahikkala (On Top Management Support for Software

Cost Estimation, PhD 2019), Anne-Maarit Majanoja (“Selective Outsourcing in Global IT Services”, PhD 2017), Johannes Holvitie (“Technical debt in software development”, PhD 2017), Sami Mäkelä (“Cohesion metrics for improving software quality”; PhD 2016), Mika Murtojärvi (“Efficient algorithms for coastal geographic problems”; PhD 2016), Sami Hyrynsalmi (Software ecosystems; PhD in 2014), Tuomas Mäkilä (Software development, 2012).

Supervision of MSc / BSc theses

I have supervised and instructed 190+ MSc theses in technology and science. Most of the theses are made of tens of (local) companies. I have also instructed 100+ BSc theses. See <http://staff.cs.utu.fi/staff/ville.leppanen/supervision.html> .

6. Scientific expert positions and other academic credits

- Official Dissertation Opponent of Olayemi Olawumi (Univ. Eastern Finland), Sandeep Tamakar (Aalto University), Tanja Toroi (University of Kuopio), and Timo Poranen (University of Tampere).
- Dissertation referee of Jesse Yli-Huumo (Lappeenranta University of Technology), Timo Lehtonen (Technical university of Tampere), Qaisar Malik (Åbo Akademi university), Timo Aaltonen (Technical university of Tampere), Antti Autere (Helsinki univ. of technology), and Isto Aho (Univ. of Tampere).
- Refereeing provided for tens of journals and conferences; and for book publishers: Springer, Wiley & Sons; Pearson Education.
- Working in the program committee of 50+ conferences/workshops.
- Research project refereeing provided for Swedish Foundation for Strategic Research (300M kronor call), MATINE in Finland, Digital Future call in Sweden (KTH, RISE, etc, 10M kronor call), Turku University Foundation, and Slovak Research and Development Agency.

7. Duties in one’s field outside the University

- Steering group vice-member of national DIA body (2015 – today); DIA is a joint action for arranging nationwide entrance examination (and selection) for almost all MSc in Technology degree programs in Finland.
- Steering group member of DriveTurku (IT development program of City of Turku; 2014–2015).
- Board member of The Finnish Society for Computer Science, 2008–2010.
- Board member of OSCu (Open Source Courseware virtual university project; 2003–2005).
- Coach of Finnish team for International Olympiad in Informatics, 2000 – 2002. (Finland’s still best ever single and team performances took place in 2001.)

8. Scientific and societal impact

Over 230 international refereed publications. H-index: 20 (January 2022). Advisor for Ministry of Justice in the renewal of Finland’s election system (software, cyber security). Advisor of Digivision 2030 in software project leadership issues. Board member of MATINE’s (Ministry of Defence) Information technology and communication section (2016 - today)