

# Curriculum Vitae: Markku Turunen - 31.05.2024

## Full name

- Turunen, Markku Juhani, Male

## Date and place of birth, nationality, current residence

- Born on September 5th, 1970, in Varkaus, Finland. Citizen of Finland. Living in Kangasala, Finland.

## Education and degrees awarded

- Ph.D. (computer science), *University of Tampere*, 2004. Grade: *eximia cum laude approbatur*. Title: *“Jaspis – A Spoken Dialogue Architecture and its Applications”*.
- M.Sc. (computer science), *University of Tampere*, 1998. Grade: *laudatur*.
- B.Sc. (computer science), *University of Joensuu*, 1997.
- Adjunct Professor (Docent) of Interactive Technology, *University of Tampere*, 1.6. 2007 - .

## Linguistic skills

- Finnish: mother tongue, English: working language, Swedish: fluent

## Current position

- Professor of Interactive Technology, *Tampere University*, 1.1.2011 – (tenured)

## Previous work experience (since 1998)

- Research Professor, *University of Tampere*, 1.1.2009 – 31.12.2010
- Senior Researcher, *University of Tampere*, 1.8.2005 – 31.12.2008
- Professor (Acting), *University of Tampere*, 1.8.2004 – 31.7.2005
- Project Manager, *University of Tampere*, 1.10.2001 – 31.7.2004
- Researcher, *University of Tampere*, 1.3.1998 – 30.9.2001
- Visiting researcher, *Swedish Institute for Computer-Science*, Stockholm, Sweden, October 2008 - January 2009

## External funding

### More than 80 externally funded research and educational projects. Recent examples:

*TLAINEN - Improving situational awareness with artificial intelligence* (2024-2025, Ministry of Defense), *SmartRail#3* (Business Finland, 2023-2025), *SITeS-JM- Sustainable Information Technologies for Societies Joint Masters* (EU, 2023-2029), *BERT - Breaking Education Barriers: Inclusion, Rehabilitation, and Technology* (Ministry of Education, 2024-2026), *DeMo - Decarbonizing transport and Mobility through data-driven modal shift* (Business Finland, 2023-2025), *XR-SPACE - XR Simulation and Presence at the Cloud Edge* (Business Finland, 2022-2025). “*COFIRDI - Co-creation Platform for Finnish Indian R&D* (Business Finland, 2022-2023)”, “*GEM – Green Education in Media* (EU, 2022-2025)”, “*CHEPRI - Competencies by Health technology Education in Prevention & Rehabilitation Intertwined*” (EU, 2021-2024), “*Smart Art - Changing skills in the performing arts*” (EU/ESR, 2021-2023), “*SAFARI*” (Industry, 2021-2023), “*Smart Campus - National RDI Network - From Innovations to Business*” (Academy of Finland, 2020-2022), “*Accessibility of AI-based virtual technologies in rehabilitation*” (Ministry of Education, 2021-2022), “*AIAI - Towards Accessible and Inclusive Artificial Intelligence: Building on Finnish and Indian Expertise, Experiences, and Diversity*” (Ministry of Education, 2020-2023), “*LEADBEHA - LEADership as a trigger for BEHAVioural change when creating AI cultures in companies and organisations*” (ESF/EU, 2019-2022), “*EMEX - Emerging Media Exploration*” (Erasmus+, 2018-2021), “*SmartTram2*” (Business Finland, 2019-2021), “*OBELIX - Omni-Channel Brand Interaction Ecosystem for Consumer Products*” (Business Finland, 2019-2020)\*, “*RemoteFeel – Digital Feel for Accurate Operation of Work Machines*” (Business Finland, 2018-2020), “*Digital User Services in Real Estate Business*” (Business Finland, 2018-2019), “*Design for Value*” (Tekes, 2017-2019), “*Digital Language Typology: Mining from the Surface to the Core*” (Academy of Finland, 2016 – 2019), “*Living Lab Bus*” (Tekes, 2015 – 2019).

## Leadership and supervision

- Leader of the *Pervasive Interaction research group* since 2004 (approx. 15 members).
- PhD supervision: 8 supervised (plus one as second supervisor). Supervising currently 12 active Ph.D. students + 6 others.
- Leader of IT-group of *Department of Computer Sciences* and *School of Information Sciences* 2010-2011.

## Merits in teaching and pedagogical competence

Responsible person of international M.Sc. programmes: “Sustainable Societies and Digitalisation” (2020-) and “Human-Technology Interaction” (-2020); curricula planning, student selection and supervision, overall management of the programme. Teaching of more than 30 courses. Example courses: *Information Analysis and Visualization*, *Multimodal Interaction*, *Pervasive Interaction in Smart Environments*, *Postgraduate seminar in Interactive Technology*, *Human-Technology Interaction Project Work*, *Master's Thesis Seminar in Interactive Technology*, *HCI4D - Overcoming the Digital Divide*, *ICT4D - Information and Communication Technologies for Development*. Supervised 94 M.Sc. thesis, examined 82.

## Awards, prizes and honours

Best Paper Award: Mindtrek 2018 (“Hotspot Interaction in Omnidirectional Videos Using Head-Mounted Displays”). Reviewer’s Choice Award & Best Presentation Award: Interact 2017 - The 16th IFIP TC.13 International Conference on Human-Computer Interaction (“User Experience and Immersion of Interactive Omnidirectional Videos in CAVE Systems and Head-Mounted Displays”). Best Demo Award: CSCW 2016 – the 19<sup>th</sup> ACM Conference on Computer-Supported Cooperative Work and Social Computing (“CityCompass” collaborative language learning application). FIMECC Prize 2011 – Best research result of the FIMECC SHOK programme (“Gesture control for factory automation” application). Best Demo Award: AAMAS 2010 – the Ninth International Conference on *Autonomous Agents and Multiagent Systems* (“How Was Your Day?” dialogue system). Best Paper Award: MobileHCI 2009 - the 11th International Conference on *Human-Computer Interaction with Mobile Devices and Service* (“Multimodal control system for homes” application). Best Computer Science Ph.D. thesis in Finland in 2004 – The *Finnish Information Processing Association* on the recommendation of the *Finnish Society for Computer Science*. Finalist for the European most promising young researcher in computer science and applied mathematics in 2005 – The *European Research Consortium for Informatics and Mathematics*. Best Computer Science M.Sc. thesis in Finland in 1998 – The *Finnish Society for Computer Science*.

## Other academic merits

250+ publications. Pre-examiner of 9 and opponent of 9 doctoral dissertations. Evaluation of 5 academic docent applications. Active participation in conference and workshop organization and committee’s (more than 40), reviewer for journals, conferences and workshops, research grants etc. (hundreds). General Chair of the *Academic MindTrek* conference since 2015. Chairman of the *Indian Network*, *University of Tampere* since 2015. Member of *Faculty of Communication Sciences Council*, *University of Tampere*, 2017 – 2018. Member of *School of Information Sciences Council*, *University of Tampere*, 2014 – 2016. Member of *Computer Science Department Council*, *University of Tampere*, 2007 – 2010. Member of *Hypermedia Laboratory Council*, *University of Tampere*, 2004–2008. Vice-member of *Faculty of Information Sciences Council*, *University of Tampere*, 2004 – 2007. Vice-member of *Computer Science Department Council*, *University of Tampere*, 2001 – 2007. Vice-member of *Research Council*, *University of Tampere*, 2002 – 2004. Member of *Computer Science Department Council*, *University of Joensuu*, 1994 – 1995. Member of *Faculty of Natural Science Council*, *University of Joensuu*, 1994 – 1995. Invited keynote speaker, *India HCI 2015*, *Guwahati*.

## Positions of trust in society and other societal merits

Member, Board of the *Finnish Information Processing Association* (TTL ry), 2009 –2012, Member, Board of *Demola*, 2008 – 2017, Member, Board of *Suuntaamo*, Member, Board of the *Centre for Ubiquitous Computing* (CUBIQ), Vice-member, Board of *Kites ry* (Finnish Society for Language Technology), Member, Treasurer, Board of the *Finnish Society for Computer Science*, 2007 – 2009, Chairman, Board of the *Tampere Information Processing Association* (PITKY), 2003 – 2004, Member, Board of the *Tampere Information Processing Association* (PITKY), 2001 – 2002.