



CURRICULUM VITAE

1 PERSONAL DATA

Surname: Korhonen
Given Names: Timo Olavi
Date of Birth: August 8, 1960
Nationality: Finnish
Academic rank: adj. prof. (Docent), Aalto University, Finland
Present Position: Data Analyst, Eye and Ear Hospital, Helsinki
Career Degrees: -PhD (Telecom Tech.), Aalto University '99,
-MSc (Telecom Tech.), Tampere University of
Technology '90,
-BSc (Telecom Tech.), Technical Institute of
Turku '87
Homepage: <http://koti.mbnet.fi/tmokor/home>
List of publications: See the homepage

2 CAREER OVERVIEW (academic posts only)

1986 – 1989 Research Assistant, Laboratory of Telecommunications, Tampere University of Technology. Project management of UNIDA (United Nations Industrial Development Association) project of 140 Mbit/s intensity modulated optical system for ECIL Ltd. India. Design and realization of 565/140 Mbit/s coherent optical FSK-system (Master's Thesis)

1989-1990 Teaching Assistant in Laboratory of Telecommunications, Tampere University of Technology. Lectures of Digital Transmission Systems and giving tutorials in various courses in the field of telecommunication. Participation on various projects in the laboratory.

1990-1992 Research Associate. Establishing Member for Division of Telecommunications. Taking care of practicalities in setting up telecommunications laboratory and related staff arrangements. Curriculum planning and detailing of laboratory exercises in telecommunications and electronic design (Asian Institute of Technology, Bangkok, Thailand)

1992-1999 Doctorate student (Research Scientist). Lecturing courses in telecommunications technology and participating to associated research work (Helsinki University of Technology)

1999-2013 Research Scientist, Docent (2011-), Adjunct/Associate Professor (ma. prof) in Telecommunications (6 years period) Aalto University, Finland

- Lecturing courses in telecommunications technology, user centered design and product development in Helsinki University of Technology/Aalto University
- Project works (Section 4)
- Invited lecturing (Section 7)
- Participating/organizing national and international conferences in telecommunication technology, product development and in wellbeing technologies (Section 5)
- EU Latin America (EU-LAC) Finnish Delegation Member¹
- Supervision and instruction over 100 MSc students (listed at homepage) and Doctorates (Helsinki University of Technology)
- Reviewer and opponent for PhD theses (Section 5)
- Expert evaluator for EU research programs
- Research work is published in international journal and conference papers (listed at homepage). I have published two books relating to the Product Development of Telecommunication Systems²

2011- 2013 Data Analyst in Development of Wet Macular Degeneration follow-up user-application for Eye and Ear Hospital, Helsinki, Finland

¹ ICT Challenges for Innovation Fostering the Research Dimension of S&T 7 – 8 June, 2011, Santiago – Chile and Presentation in EU-LAC Joint Initiative for Research and Innovation – Senior Officials' Meeting, 14-16 April, 2013, Brussels (Aalto University).

² T. Korhonen, A. Ainamo: Handbook of Product and Service Development in Communication and Information Technology, Kluwer Academy Press, 2003 and T. Korhonen: Development of High-tech Products and Services, Pearson 2007.

2013 – 2016 Research Coordinator, Aalto University and University of Helsinki. PRECIOUS³ EU-project (PREventive Care Infrastructure based On Ubiquitous Sensing)

2013 - Data Analyst in Development of Wet Macular Degeneration intra-ocular injection follow-up and treatment policies for Eye and Ear Hospital, Helsinki, Finland

3 SUPERVISION/INSTRUCTION OF DOCTORAL THESES

- Naser Tarhuni: Fiber-Optic Code Division Multiple Access: Multi-Class Optical Orthogonal Codes, Optical Power Control, and Polarization Encoding
- Jianwei Wang: Studies in Cross-Layer Design, Peking University
- Risto Ööri: Advances in Intelligent Transport Systems
- Marita Seppänen: Argumentation in Pedagogy, about 60 % completed

List of supervised/instructed MSc studies:
<http://koti.mbnet.fi/tmokor/home/>

4 PROJECTS

- Research Coordinator, PRECIOUS 2013-2016 PREventive Care Infrastructure based On Ubiquitous Sensing, (EU funded)
- Project Developer, Aalto Health Factory 2012-2013 (Aalto University)
- Project Leader, CHI-FIN UBI-SERV 2009-2011 User-centric Design of Ubiquitous Welfare and Safety Services and Supporting Technologies for China and Finland (Academy of Finland / Aalto University)
- Telecommunications Consult, Estimation of Telecommunication Technologies, Services and Costs to Support Public Transport Information System Requirements, Helsinki Metropolitan Area Council (YTV/ HSL), 2010, report available⁴
- Research Scientist, WOMEQUAL 2006-2007 Web-community for Women Equality (EU /Helsinki University of Technology)
- Project Leader, LED/PLC⁵ 2003-2006 Modular LED-PLC Lighting System (Technology Agency of Finland TEKES)
- Research Scientist, SYTE 1999-2002 System Technologies for Future Telecommunications, (TEKES)

³ <http://www.thepreciousproject.eu/>

⁴ Selecting Telecommunications Technologies for intelligent transport system services in helsinki municipality, Intelligent Transport Systems, IET , Volume:6 , Issue: 1 DOI: 10.1049/iet-its.2010.0090

⁵ Power-line communications

- Research Scientist, ACCESS 1999-2000 Architectures of Access Networks (TEKES)

5 OVERVIEW OF TASKS OF SCIENTIFIC EXPERTISE

REVIEWER AND OPPONENT FOR PHD THESIS

2011 Jiehan Zhou: Pervasive Service Computing: Community Coordinated Multimedia, Context Awareness, and Service Composition

2005 Vinh V. Phan: Smart Packet Access and Call Admission Control for Efficient Resource Management in Advanced Wireless Networks, University of Oulu

2000 Haifeng Wang: Advanced Multiuser Receiver for CDMA Communications, Tampere University of Technology

EXPERT EVALUATOR FOR EU

-2006, 2008, 2012, 2013 (FP6 and FP7)

CONFERENCE SESSION CHAIRING AND COMPARABLE TASKS

- WPMC'00 Invited Mobile IP Panelist
- ICC'01 **TPC⁶ vice chair**, session chair and session organizer
- ICC'02 session chair (OFDM⁷-technologies)
- WPMC'02 Session organizing and chairing for two sessions
- FWCW'02 **TPC chair** and session organizer
- WPMC'04 session chair (CDMA⁸-technologies)
- PIMRC'06 session chair
- ICC'06 Round Table Panelist: Challenging ahead in Wireless Sensor Networks
- UBI-HEALTH'10 **TPC Chair**

SCIENTIFIC BOARD ACTIVITIES

- 2001 - Editorial board member, Wireless Personal Communications
- 2002 - Reviewer, Swedish Research Council
- 2005 - Member, IEEE P1901 PLC Standardization Workgroup
- 2005 - Member, IEEE ComSoc Emerging Technical Committee Broadband over Power Lines
- 2006 - Member, International Journal of Communication System, editorial board

⁶ Technical Program Committee

⁷ Orthogonal Frequency Division Multiplexing

⁸ Code-Division Multiple Access

REVIEWER FOR SCIENTIFIC PUBLICATIONS

1999- IEE Communications Proceedings
 2000- IEEE Transactions on Communications
 2001- Wireless Personal Communications
 2002- IEE Electronics Letters
 2002- IEEE Transactions on Wireless Communications
 2006 - International Journal of Communication Systems (Editorial board)
 2008 - IEEE Journal on Selected Areas in Communications

TECHNICAL PROGRAM COMMITTEE MEMBERSHIPS
 IN INTERNATIONAL CONFERENCES

GPC'11, ISCAS '00, FWCW'01,'02, ISPLC'05-'07, ICC'01-'07, Globecom'01,
 '02,'05-'09, WPMC'00,'01, '02 '05, '09; IWS'05, WCNC'05

ORGANIZATION DEVELOPMENT STUDY

2007 Member of Dipoli International Peer Review committee,
 Representative of Helsinki University of Technology

GRANTS

1996 Nokia Foundation (FIM 15,000) for studies for doctoral degree
 1990 Walter Ahlström Foundation (FIM 15,000) for studies for licentiate
 degree

6 LECTURED COURSES (Helsinki University of Technology and Aalto-university)

S-72.227 Digital Communication Systems
 S-72.244 Modulation and Coding Methods
 S-72.700 Code Division and Orthogonal Multiplexed Systems
 S-72.1130 Telecommunication Systems
 S-72 1140 Transmission Methods in Telecommunication Systems
 S-72.1510 Human Centric Telecommunications
 S-72.2510 User Centric Design of Telecommunication Services
 S-72.2530 Acceptability and Quality of Service
 S-72.3510 Product Development of Telecommunication Systems

7 INVITED LECTURING

- Argumentation in Service Design and Leadership (Argumentaatio palvelusuunnittelussa ja johtamisessa), Argumentation and Critical Thinking (Argumentaation ja kriittisen ajattelun taidot) 51C00100 6 ECP, Chydenia, University of Helsinki, 3.3. 2014
- Quality management in Product Development (Tuotekehitysasiantuntija yrityksille F.E.C: Tuotekehitysprosessin laadunhallinta), Aalto PRO series of lectures for enterprises, Seinäjoki, Adult Education Center Dipoli, Espoo, Finland, 5.3.2012
- Diploma in Product Development: Quality in Product and Service Development (Tuotekehityksen laatu), Adult Education Center Dipoli, Espoo, Finland, 26.10.2012
- Health and ECO-health in China, TalentIT fairs, Dipoli, Espoo, Finland, 1.11.2012
- Pathways from Taking Care of Sickesses to the Taking Care of Health – Lessons from China (Sairauden hoidosta terveyden hoitoon - mitä voimme oppia Kiinasta?) Press Conference, Academy of Finland, 14.1.2011
- Elderly health in China and in Finland (Ikäihmisten hoitoa Suomessa ja Kiinassa), Jyväskylän ikääntyvien yliopisto, Jyväskylä University, Finland, 8.11.2011
- Dipoli Adult Education Centre: Quality Processes of Product Development, October, several lectures in 2009, 2010, and 2011.
- Quality in Aalto University – Invited presentation to Honor Dr Naoki Murata, Executive Director, Japan Society for the Promotion of Science (JSPS) visit in Aalto University, 3.6.2009
- Key Note: Dimensions of User Centric Design, International Conference on Communications, Signals and Coding (MIC-CSC '08), Amman, Jordan, 17-19 Oct. 2008
- Frontiers of Aalto University: Scientific Research, Teaching and Product Development in a Multidisciplinary Framework, Invited Speech to Honor Visit of the Vietnamese ICR delegation to Finland, 26 – 31 Oct. 2008
- Workshop of Innovations in Product Development, Design and Lecturing at Peking University, China, 25 Sept. 2007

- Workshop on Advanced Telecommunications for Wireless Systems Organized jointly by Helsinki University of Technology (HUT) and Peking University (PKU) Workshop organizer and presenter, HUT, Aug. 20-22, 2007
- Telecommunications Technology, Nokia Booster Training Program, Dipoli Education Center with Nokia Networks, several lectures in 2004-2005
- Optical Networking, AEL Ltd. (Ammattien Edistämislaitos), several lectures in 2004-2005
- Development Trends in Fixed Telecommunication Networks (Kiinteän televerkon kehittymisen suuntavivoja), Finnet Focus, 26.1.2005
- ABC of Telecommunications Technology, Dipoli Education Center in cooperation with Finland Post Group, 16.11.2004
- Telecommunication Systems: Terminals, Portals, and Transmission Technologies, Dipoli Education Center in cooperation with Finland Post Group, 16.11.2004
- Industry-University Cooperation in Finland and Otaniemi Cluster, Dipoli Education Center. Presentation for ITU MM 2003 Japan's Industry Delegation Visit in Dipoli, 7.10.2003.
- Telecommunication Technology in Nokia's Professional Purchaser – course, Dipoli Education Center, 25.10.2003.
- "4G Networks" in the Path to 4G Mobile, London. Organized by IIR Telecommunications & Technology, London. Technical Program Committee member and lecturer, 22 - 24.10.2002
- "Next Generation Networks" in MobiConnect, The Radisson SAS Hesperia Hotel, Helsinki, Organized by IIR Finland Ltd, 22.5.2002
- Overview to 4G Development in Telecommunications of the Future, Tulevaisuuden Teletekniikka, Hotel Kalastajatorppa, Helsinki, Organized by IIR Finland Ltd., 13.3.2002
- Migration Paths to 4G mobile in the Path to 4G Mobile, The Strand InterContinental Hotel, Helsinki. Opening speech and session chairmanship. Organized by IIR Telecommunications & Technology, London. 13-14.9.2001
- "Evolving Internet Access" in Developing Telecommunication Networks, Marina Congress Center, Helsinki, Organized by kontakti.net, 29-30.8.2001