

CURRICULUM VITAE

GENERAL

Date and place of birth: July 7, 1948, Helsinki
Nationality: Finnish
Sons: Joonas and Sampsa born 1980 and 1982

EDUCATION

1972 Diploma Engineer (Master of Science in Engineering) in engineering mathematics and systems theory. Department of Technical Physics, Helsinki University of Technology
1976 Licentiate of Technology, as above
1977 Doctor of Technology, as above
[Optimal controller design by nonlinear and game theoretic methods](#)

Knowledge of Languages: English (good), Swedish (good), German (moderate), French (moderate)

ACADEMIC CAREER

2016 - Senior Advisor, Professor Emeritus, Aalto University
2010 - 2016 Professor of Applied Mathematics (operations research), Aalto University
1981 - 2010 Professor of Applied Mathematics (operations research) Helsinki University of Technology
1995 - 2016 Founder and Director of National Doctoral Graduate School in Systems Analysis, Decision Making and Risk Management
1996 - 1998 Deputy Head of the Department of Engineering Physics and Mathematics, HUT
1984 - 2016 Founder and Director of Systems Analysis Laboratory, HUT
1979 - 1981 Professor of Mathematics and Operations Research, University of Vaasa, Finland
1979 Senior Research Fellow of the Academy of Finland
1978 - 1979 Associate Professor of Applied Mathematics, Kuopio University (on leave of absence)
1976 - 1978 Junior Research Fellow of the Academy of Finland
1974 - 1976 Research Assistant Fellow of the Academy of Finland

VISITS ABROAD AND SABBATICALS

2015-2016	Macquaire University, Risk Frontiers, Sydney December 2015-January 2016
2013-2014	University of Technology Sydney, Institute for Sustainable Futures, Distinguished Visiting Scholar from December 2013 to February 2014.
2010-2011	National University of Singapore, Department of Decision Sciences, Singapore, from December 2010 to March 2011.
2006	University of Auckland, Department of Engineering Science, New Zealand, from January to May 2006, Honorary Professor in Engineering Science
2005	MIT, Sloan School of Management, from September to December 2005, Visiting Scholar
1996 - 1997	University of Cape Town, Dept. of Statistical Sciences, South Africa, from September 1996 to January 1997
1991 - 1992	University of California, Los Angeles (UCLA), Cognitive Systems Laboratory, Dept. of Computer Science
1985 - 1986	University of California, Los Angeles (UCLA), Cognitive Systems Laboratory, Dept. of Computer Science
1980 - 1981	University of California, Berkeley (UCB) Dept. of Mathematics and Dept. of Economics and University of California, Los Angeles (UCLA) Dept. of System Science (Fulbright grant)

OTHER ASSIGNMENTS AND MEMBERSHIP IN SCIENTIFIC BODIES

1998 - 2008	Member of the National IIASA Committee of Finland
1996 - 1998	Chairman of the European Assembly of the Decision Analysis Society of the Institute for Operations Research and the Management Sciences (INFORMS)
1996 - 1998	Member of the Administrative Committee of the IEEE Systems, Man and Cybernetics Society.
1994 - 2000	Member of Systems Analysis Division, Scientific Advisory Board for Defence (MATINE)
1992	Full Member of the Operations Research Society of America International Society of Dynamic Games:
1990 - 2002	- Member of the Executive Board
1990 - 2002	- Host of the Secretariat
1990 - 2006	- Editor of the Society's Newsletter
1985, 87 - 93	Member of the Board of the Finnish Operations Research Society
1983 - 1991	Member of the Scientific Advisory Committee for the Finnish IIASA-Committee
1982 - 2016	Finnish Representative in the Technical Committee on System Modeling and Optimization, (TC-7) International Federation of Information Processing (IFIP)
1980 - 1994	Finnish Representative in the Mathematics of Control Committee, International Federation of Automatic Control (IFAC)
1980 - 1982	Member of the Research Council for Technology of the Academy of Finland
1979 - 1990	Chairman of the Committee for Scientific Cooperation between The Academy of Finland and the International Research Institute for Management Science (IRIMS), Moscow

BIOGRAPHICAL REFERENCES

Marquis' Who's Who in the World
Men of Achievement
Who is Who in Finland

AWARDS AND HONORS

2008	Honorary President, The Finnish Operations Research Society.
2004	The MCDM Edgeworth-Pareto Award, International Society on Multiple Criteria Decision Making.
1985	Member of the Finnish Academy of Technology.
1985, 90	Senior Researchers' Award, The Academy of Finland.
1984	France-Finland scientific fellowship, (June-July).

1980 - 81 Fulbright Research Grant.

SCIENTIFIC REVIEWING AND EDITORIALSHIPS

Reviewer of research projects for:

National Science Foundation, USA
European Commission
The Canada Council
FWF Austrian Science Fund
Academy of Finland
The Finnish Work Environment Fund

Membership in editorial boards of professional journals:

2015 - Editorial Board of Operational Research: An International Journal (ORIJ)
2014 - 2019 Editorial Board of Systems Research and Behavioral Science
2012 - Editorial Board of Euro Journal of Decision Processes
2011 - 13 Associate Editor of Dynamic Games and Applications
2003 - 2014 Editorial Board of European Journal of Operational Research
2001 - 11 Editorial Board of Decision Analysis
2012 - Associate Editor of Decision Analysis
2001 - 04 Editorial Board of Journal Risk, Decision and Policy
1998 - Associate Editor of International Game Theory Review
1996 - 04 Editorial Board of Energy Economics
1992 - 14 Editorial Board of Control and Cybernetics Journal
1993 - Departmental Editor and Associate Editor of Journal of Group Decision and Negotiation.
1987 - 97 Associate Editor of Modeling Methodology Forum of the Journal of Applied Physiology

Reviewer of papers for:

Annals of Dynamic Games
Automatica
Decision Sciences
Energy
Energy Policy
Environmental Economics
European Journal of Operational Research
IEEE Transactions on Automatic Control
IEEE Systems, Man, and Cybernetics
International Game Theory Review
Journal of Economic Dynamics and Control
Journal of Group Decision and Negotiation
Journal of Environmental Management
Journal of Multi-Criteria Decision Analysis
Management Science
Journal Risk, Decision and Policy
Marine Resource Economics
Scandinavian Journal of Economics

RESEARCH INTERESTS

Behavioural Operational Research
Systems intelligence
Environmental decision making and modeling
Multi-criteria decision analysis
Path dependence in modelling
Decision support systems

Dynamic games and optimization
Simulation
Energy modeling and electricity pricing

DOCTORAL GRADUATES

Ilkka Leppänen (Aalto) 2016
Tuomas Mattila (Aalto) 2013
Jirka Poropudas (Aalto) 2011
Mika Marttunen (Aalto) 2011
Jari Perttunen (HUT) 2009
Janne Karelahti (HUT) 2008
Jyri Mustajoki (HUT) 2007
Albert Höglund (HUT) 2006
Erkka Näsäkkälä (HUT) 2005
Kai Virtanen (HUT) 2005
Kari Sinkko (HUT) 2004
Tony Rosqvist (HUT) 2003
Maria Holmberg (HUT) 2003
Jyri Seppälä (HUT) 2003
Jukka K. Nurminen (HUT) 2003
Pauli Murto (HUT) 2003
Anu Kettunen (HUT) 2003
Jouni Pyykönen (HUT) 2002
Kimmo Uutela (HUT) 2001
Heikki Lehtonen (HUT) 2001
Arto Inkala (HUT) 2001
Riitta Nelimarkka (UIAH) 2000
Tuomas Raivio (HUT) 2000
Janica Ylikarjula (HUT) 2000
Miika Linna (HUT) 1999
Kaisa Simola (HUT) 1999
Jussi Keppo (HUT) 1998
Mari Pöyhönen (HUT) 1998
Jukka Sinisalo (HUT) 1998
Jan Holmberg (HUT) 1997
Marja-Liisa Siikonen (HUT) 1997
Pertti Laininen (HUT) 1996
Osmo Jauri (HUT) 1995
Tatu Koljonen (HUT) 1995
Mika Räsänen (HUT) 1995
Urho Pulkkinen (HUT) 1994
Markku Verkama (HUT) 1994
Ahti Salo (HUT) 1992
Jukka Ruusunen (HUT) 1991
Harri Ehtamo (HUT) 1989
Jari Hämäläinen (HUT) 1988
Veijo Kaitala (HUT) 1985

MAJOR RESEARCH CONTRACTS

2003 - 2016	Finnish Air Force: "The strategy of flight and pilot decision-making".
2001 - 2004	European Commission, "Information Requirements and Countermeasure Evaluation Techniques in Nuclear Emergency Management (EVATECH)", Partner together with the Finnish Centre for Radiation and Nuclear Safety.
2000 - 2002	European Commission, Information societies technology (IST) program: "Learning and teaching operations research and management science (OR/MS) with a web based hyper-media learning environment", Principal contractor; coordinator: University of Paderborn, Germany.

2001 - 2003 Finnish Air Force: "The dynamics and strategy of flight and the analysis of maintenance systems under uncertain operating conditions".

1993 - 2001 Finnish Air Force: "The dynamics and strategy of flight".

1993 - 2001 Academy of Finland: "Multiple criteria decision analysis in water resources planning (RE-STORE)"Principal contractor; partner: The Finnish Environment Institute.

1999 - 2001 Patria Finavitec Ltd: "Target selection algorithms".

1993 - 2001 Academy of Finland: "Sustainable regulation of large watercourses: principles, indicators and method", Principal partner together with the Finnish Environment Institute.

1997 - 1998 European Commission, Nuclear fission safety program: "Finnish decision conferencing in nuclear emergency management", Partner together with the Finnish Centre for Radiation and Nuclear Safety.