



## Basic Information

Full Name	<b>Teemu T. Roos</b>
Date of Birth	April 20, 1975, Janakkala, Finland
Present Employer	Department of Computer Science, University of Helsinki (U Helsinki)
Present Position	Full Professor (1/2020-) Group leader (Complex Systems Computation research group)

## Education

2007	Doctor of Philosophy in Computer Science (CS), U Helsinki
2001	Master of Science in CS, U Helsinki
1994	Matriculation examination, Tervakosken Lukio, Janakkala

## Previous Employment

01/2017 – 12/2019	Associate Professor (tenure-track), Dept of CS, U Helsinki
04/2013 – 12/2016	Assistant Professor (tenure-track), Dept of CS, U Helsinki
05/2011 – 03/2013	Senior Researcher, Helsinki Institute for Information Technology HIIT, U Helsinki
09/2007 – 04/2011	Postdoctoral Researcher/University Lecturer Dept of CS & the National Library of Finland, U Helsinki
09/2001 – 08/2007	Doctoral Student, Dept of CS, U Helsinki
01/1997 – 08/2001	Teaching/Research Assistant, Dept of CS, U Helsinki
06/1997 – 05/1999	Software Developer, Tieto Corporation Ltd.

## Honours and Awards

2020	World Summit AI's Top-50 Innovators in 2020
2019	IT Influencer of the Year, Tivi Magazine
2019	Nokia Foundation Recognition Award (with Hanna Hagström)
2019	Communications Act of the Year (for "The Elements of AI"), Finnish Association of Communication Professionals
2018	Ambassador of Finnish Code, Code from Finland Society
2014	Senior Teacher Prize, Dept of CS, U Helsinki
2013	Best Paper Honorable Mention Award at the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)
2009	European Research Consortium for Informatics and Mathematics ERCIM Cor Baayen award
2009	Senior Researcher Prize, Dept of CS, U Helsinki

2008	Classification Society Distinguished Dissertation Award Shortlist
2006	Junior Researcher Prize, Dept of CS, U Helsinki
2005	Best Paper Award at the 17th Belgian-Dutch Conference on Artificial Intelligence (BNAIC)

## Qualifications in Research

### Positions of Scientific Expertise

- \* Associate Editor: Behaviormetrika (Springer) 2017 –
- \* Guest Editor: special issues in the International Journal on Approximate Reasoning (2012), EURASIP Journal of Bioinformatics and Systems Biology (2007), Digital Scholarship in the Humanities (2016)
- \* PC Co-chair: WITMSE-2011,2012,2014,2015,2016,2017, PGM 2010, ESTS-2014.
- \* Program Committee Member (selected conferences): AISTATS-2011,2014,2015,2022, UAI 2008–2022, ICML 2018–2022, IJCAI-2013,2015,2018, NeurIPS-2014–2022, ECML/PKDD-2009,2012, ICDM-2014.
- \* Ad-hoc Referee (selected journals): Nature Communications, Bayesian Analysis, Statistics and Computing, Statistica Sinica, Journal of the Royal Statistical Society, J Machine Learning Research, Machine Learning, Int. J Approximate Reasoning, IEEE Trans Information Theory, IEEE TPAMI, GENETICS, Methods in Ecology & Evolution

### International Activities (Long-term Academic Visits Abroad)

2018	2.5 months, UC San Diego & UC Berkeley
2015	2.5 months, UC Berkeley & University of Southern California
2013	2.5 months, the Finnish Institute in Rome, Italy
2012	4 months, Visiting Fellow at University of Cambridge, UK
2010	3 months, MIT
2008	4 months, UC Berkeley
2005	2 months, Centrum Wiskunde en Informatica (CWI), Amsterdam
2002	5 months, Centrum Wiskunde en Informatica (CWI), Amsterdam
1999	3 months, Data Mining Lab, CSELT/Telecom Italia, Turin, Italy

### Invited Talks (selected)

ITA Workshop, UCSD (2008, 2009, 2012, 2013, 2015, 2018, 2023), HP Labs, Palo Alto (2009), Univ. Pisa (2009), Columbia Univ. (2010), MIT (2010), Yale (2010), Washington Univ., St. Louis (2010), UCLA (2010), Microsoft Res., Cambridge, UK (2011), Univ. Sao Paulo, Brazil (2011), Durham Univ. (2012), Royal Soc Meeting, Chicheley (2014), Sorbonne Univ. (2015), Vrije Univ. Amsterdam (2015), USC (2015), Workshop on High Dimensional Big Data, Cambridge, UK (2016), Univ. Melbourne (2016), Monash Univ.

(2016), Purdue (2016), Banff Int. Res. Station (2017), Apple, Cupertino (2018), Google, Pittsburgh (2018), Club de Madrid (2019), Stanford University (2019), European Parliament (2020, World AI Summit (2020), IJCAI Workshop on AI for Social Good (2021), EU Code Week webinar on AI in Schools (2021), UNICEF Global Forum on AI for Children (2021), NVIDIA GPU Technology Conference (2022)

## External Research Funding and Projects

1/2022 – 12/2024	Academy of Finland, EUR 415 000: Distributed AI for Supercomputing and Physics (consortium with Department of Physics)
1/2022 –	Jenny and Antti Wihuri Foundation, EUR 80 000: AI & Children (consortium with University of Eastern Finland)
01/2018 – 12/2021	Amer Foundation, EUR 120 000, Sporttia Stadiin (consortium with Dept. of Sports and Exercise Medicine, Dept. of Geography & Faculty of Education)
08/2018 – 09/2019	Business Finland, EUR 50 000, Advanced Machine Learning for Industrial Applications
01/2018 – 12/2019	Academy of Finland, EUR 220 530: MachQu: Probabilistic Machine Learning for Quantum Mechanics-Based Material Design (consortium with Department of Physics)
09/2017 – 12/2021	Academy of Finland, EUR 371 825: TensorML: Tensor-Based Machine Learning for Big Data with Inherent Dependencies (consortium with University of Turku)
04/2017 – 12/2019	Academy of Finland & National Science Foundation (NSF), EUR 169 386: WiFiUS, Efficient and robust cognitive IoT systems using unreliable sensors (consortium with Carnegie Mellon University)
01/2016 – 12/2017	TEKES, EUR 502 886: Scalable Probabilistic Analytics (SPA) (co-PI with A. Klami and P. Myllymäki)
01/2011 – 12/2013	Academy of Finland, EUR 268 000: Postdoc Project
01/2009 – 12/2011	University of Helsinki Research Funds, EUR 120 000: STAM
01/2009 – 12/2010	Finnish Cultural Foundation, EUR 200 000: Workshop Grant on Stemmatology (co-PI with T. Heikkilä and P. Myllymäki)
08/2002 – 12/2002	Netherlands Organization for International Cooperation in Higher Education (Nuffic), EUR 3500: Travel scholarship
01/2002 – 12/2006	Helsinki Graduate School of Computer Science and Engineering (HeCSE): Full scholarship for doctoral studies

## Qualifications in Teaching

### Teaching Experience (Department of Computer Science, University of Helsinki)

2017–2022	6x	Lecturer of Introduction to Data Science (200+ students)
2011–2022	12x	Lecturer of Introduction to Artificial Intelligence (200+)
2016–2017	2x	Lecturer of Introduction to Machine Learning
2010–2020		Instructor of the Undergraduate Research Track
2007–2014	3x	Lecturer of Information-Theoretic Modeling
2006 –		Tutor and personal study plan counsellor (BSc and MSc level), PhD student mentor (HeCSE graduate school)
2006 –		Thesis instructor. Finished: 3 PhD theses, 20+ M.Sc. theses
1997 – 2007		Teaching assistant on various courses

### Supervised PhDs

9/2014 – 1/2020	Mr Janne Leppä-aho (PhD 2020)
1/2011 – 3/2017	Ms Yuan Zou (PhD 2017)
6/2013 – 6/2016	Mr Jussi Määtä (PhD 2016)

### Dissertation Committee Service

12/2016	Committee member for Mr Amir Jalalirad (TU Eindhoven)
5/2016	Examiner of the PhD dissertation of Mudassar Abbas (Aalto Univ.)
5/2016	Examiner for Mr Gerhardus Visser (Monash Univ.)
1/2012	Opponent at the public defense of the PhD Dissertation of Mr Thomas Toftkjaer (Aarhus University, Denmark)
5/2011	Examiner of the PhD dissertation of Mr Seyed A. Razavi (Tampere University of Technology)

## Scientific Publications

### Summary of peer reviewed publications

24 papers in scientific journals, 4 book chapters, 36 papers in peer-reviewed conference proceedings, two international patents

### Bibliometric statistics (accessed March 22, 2023)

h-index 27 (Google Scholar), total citations 4077 (Google Scholar)

Erdős number: 3

## Contact Information

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### Mailing address

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### Telephone

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