

ACADEMIC CURRICULUM VITAE

MARTTI VAINIO

BASIC INFORMATION

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Current position

Professor (Phonetics)

Education

2008	Adjunct Professor (Docent), general phonetics, University of Helsinki.
2007	University pedagogy (10 credits), Faculty of Behavioral Sciences, University of Helsinki.
2006	Adjunct Professor (Docent), Language technology, Department of General Linguistics, University of Helsinki.
2002	Ph.D. in Phonetics, University of Helsinki, Finland.
1995	M.A. in Phonetics and Computational Linguistics, University of Helsinki, Finland.
1981	Matriculation Examination (Finnish “lukio”): Helsingin Rudolf Steiner-koulu, Helsinki, Finland.
1979	High school graduate: Seymour High School, Seymour Indiana, U.S.A.

Previous professional appointments

2008 – 2013	Finnish Academy Research Fellow
1/2008–7/2008	Research Coordinator for national language and speech technology infrastructure development within the EU FP7 program’s CLARIN project, Department of General Linguistics, University of Helsinki.
10/2007–12/2007	Senior researcher, Department of Speech Sciences, University of Helsinki.
01/2006–10/2007	Professor (pro tempore, general phonetics), Department of Phonetics, University of Helsinki.
01/2001–12/2005	University Lecturer (phonetics of speech technology), Department of Phonetics and the Department of General Linguistics, University of Helsinki.
03/2000–03/2003	Research Scientist, development of Finnish text-to-speech synthesis, TEKES funded Usix project; <i>Finnish Speech Technology: A Multidisciplinary Project</i> .
01/1999–07/1999	Research Scientist, Helsinki University of Technology, Finland.
09/1993–10/1998	Research scientist: The development the Finnish Speech Database at the Acoustics Laboratory, Helsinki University of Technology and the Department of Phonetics, University of Helsinki. Between January 1st, 1996 and October 31st, 1998 with funding from the Academy of Finland (grant 10134236).

01/1994–11/1994	The development of a system to translate BLISS-symbols to natural Finnish (in co-operation with Infovox AB, and the Royal Institute of Technology, Stockholm, Sweden, and the Department of General Linguistics, University of Helsinki, Finland).
11/1993–12/1995	Laboratory engineer (part time), Department of Phonetics, University of Helsinki.
10/1992–12/1993	The development and evaluation of the Finnish version of the Infovox text-to-speech system (in co-operation with Infovox AB, and the Royal Institute of Technology, Stockholm, Sweden).

RESEARCH GRANTS

2016-2017	Speech Synthesis in Gaming and Learning, research grant in Tekes TUTLI (<i>New knowledge and business from research ideas</i>) program
2016-2019	Digital Language Typology; Finnish Academy research grant (head of consortium) in the Digital Humanities programme (grang number 293348).
2015-2016	Bedömning av muntlig färdighet i språkproven i stud, Svenska Folkskolans Vänner. DigiTala project for developing automatic means for spoken language skill assessment.
2013-2016	Cross-modal connections between speech communication, hand gestures and perception; Finnish Academy research grant in the MIND research programme (grant number 265610).
11/2011–11/2014	EU, FP7, Strep: Simple4All; Speech Synthesis that Improves Through Adaptive Learning
01/2011–06/2012	Tekes: Personalized Hidden Markov Modeling (HMM) – based Text-to-Speech Synthesis: Assistive Technology for People with Communication Disabilities
01/2010–12/2013	Research grant as part of the consortium CSI-Speech in the Finnish Academy research programme LASTU.
01/2009–12/2009	Nokia Oyj: Glottal HMM Speech synthesis.
01/2009–12/2012	Suomen Akatemia (Academy of Finland): Adaptive spatial model for vocal expression: emotional speech synthesis for Finnish, grant number 128204)
01/2009–12/2012	Academy Fellowship, Suomen Akatemia (Academy of Finland: Adaptive model for vocal expression - development of emotional speech synthesis for Finnish, grant number 125940)
10/2007–12/2007	Research grant: Faculty of Behavioral Sciences, University of Helsinki.
01/2005–12/2008	Suomen Akatemia (Academy of Finland: Phonetics and phonology of Finnish intonation, grant number 107606)
05/2003–05/2007	Finnish Technology Agency (Tekes); subproject "Finnish Concept-to-Speech system" in PUMS I, II, III, IV (Puheteknologian uudet menetelmät ja sovellukset).
03/2002–05/2002	Nokia Oyj: Phonetically balanced sentence sets for communications system testing.
03/2000–05/2000	Research grant: University of Helsinki.
01/1999–07/1999	Research grant: Alfred Kordelin Fund.

TEACHING AND SUPERVISION

2008-	Currently supervising six Ph.D candidates. Mikko Tiainen to defend his thesis in early 2018.
2015	Ritva Torppa, PhD
01/1993–12/2000	Several courses on speech synthesis and speech corpora, Department of Phonetics, University of Helsinki.
02/2000–05/2000	Laboratory of Computational Engineering, Helsinki University of Technology: S-114.770, Language in communication...
02/2001–05/2001	Laboratory of Computational Engineering, Helsinki University of Technology: S-114.770, Language in communication...
09/2001–12/2005	Several courses relating to the lecturership including phonetics (basic phonetics, acoustics of speech production) and speech technology (text-to-speech synthesis, speech corpora) within the KIT-network, Department of Phonetics and Department of General Linguistics, University of Helsinki.
2006–2007	Beginning and advanced courses on general phonetics, speech analysis, and synthesis as the acting professor of phonetics; 6 courses and masters' seminar with additional minor role in other common courses at the department.
1992–2007	Developed and taught more than 10 distinct courses on phonetics and speech technology.

Recent invited courses and lectures:

2017	Logopedian vuosijuhla, Faculty of Medicine, University of Helsinki
2017	Current state of speech synthesis, Metropolia, Helsinki
2016	Current phonetics, Phoniatics, Helsinki University Hospital
2014	Hearing, Speech, and Language, Studia Generalia, University of Helsinki
2014	Plenary talk (Phonetics and Machine Learning) in 2nd International Conference on Statistical Language and Speech Processing, SLSP 2014 Grenoble, France,
2012	Physiologically grounded text-to-speech synthesis, invited lecture at NTNU, Trondheim, Norway, February 10, 2012.
2012	How to find successful funding, invited lecture at University of Helsinki, Department of foreign languages, February 2, 2012.
2009	CLARIN and FLReNet workshop, Stockholm, November 25-26, 2009.
2008	Neurocafe seminar, The Finnish Graduate School of Neuroscience

ADMINISTRATIVE AND SCIENTIFIC DUTIES

2016-2017	Panel member (linguistics) of JUFO Publication Forum.
2011-2012	Principal Investigator responsible for the Sigme (Multisensory Signals and Meanings) research community and its evaluation in the 2011-2012 University of Helsinki research evaluation exercise.
2010-2017	Member of the board of ISCA SynSig (Special Interest Group in Speech Synthesis).
2011	Member of the steering group for the personnel strategy at the Institute of Behavioural Science, University of Helsinki.

- 1/2008–7/2008 Research Coordinator for national language and speech technology infrastructure development within the EU FP7 program’s CLARIN project, Department of General Linguistics, University of Helsinki.
- 2006–2007 Responsible for a strategy for phonetics in the University of Helsinki and nationally.
- 04/2006 Quality assurance and collaboration in doctoral education in the LERU Social and Behavioural Sciences. General LERU SBS Meeting, University of Helsinki.
- 2005– Member of the directorial board of the Master’s program on Language, Speech, and Translation Technology, University of Helsinki.
- 2002–2005 Member of several scientific subcommittees in the project: *Integrated resources for speech technology and spoken language research*. Also responsible for the project proposal together with Manne Miettinen of CSC (Center for Scientific Computing, Espoo, Finland).
- 2000–2001 Member of the directorial committee on a preliminary assessment of the resources for spoken language research in Finland – “Puheentutkimukset resurssit Suomessa”.
- 1997–2001 Member of the Management Committee; COST 258, *Naturalness is Synthetic Speech*.
- 1997–1998 Scientific expert: *Suomenkielen nauhoitearkiston digitoinnin suunnittelun työryhmä* (Planning group of the digitizing of the tape archive at the Research Institute for the Languages of Finland).

Helsinki, September 27, 2017