

Curriculum Vitae
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Päivi Hannele Majaranta (born Toivola)

Faculty of Communication Sciences & Faculty of Natural Sciences
FIN-33014 University of Tampere, Finland
Tel. (office): +358-50-318-5879, Tel. (mobile): +358-50-3231733
Email: paivi.majaranta@uta.fi

Education

Ph.D. in interactive technology, University of Tampere, 2009
M.Sc. in computer science, University of Tampere, 1998

Languages

Finnish (native), English (fluent), Swedish (good), German (basics)

Employment

- 2012-current **University Researcher**, University of Tampere
Responsible teacher two in HCI courses
Researcher in "Buddy and the Smiths 2.0 – Building ecosystem for pet technology forerunners" (2016-)
2012-2016: Haptic Gaze Interaction
(<http://www.uta.fi/sis/tauchi/projects/hagi.html>)
- 2010-2011 **Postdoctoral Researcher**, University of Tampere
Human-Technology Interaction programme (<http://www.cs.uta.fi/hti>)
- 2009-2010 **Researcher**, University of Tampere
Research and Education Alliance in Humane Technology project
(<http://www.cs.tut.fi/ihte/projects/into>)
- 2004-2009 **Scientific Officer (tutkimuspäällikkö)**, University of Tampere
EU IST Network of Excellence on Communication by Gaze Interaction
(<http://www.cogain.org>). *Leader* of two work packages.
- 1998-2004 **Researcher**, University of Tampere.
2002-2004: Funded PhD student in the UCIT graduate school.
2000-2002: Interacting with Eyes: Gaze Assisted Access to Information in Multiple Languages (iEye) project.
1998-1999: Multimodal Human Information Processing and Human-Computer Interaction (MULMOD) project.
- 1997-1998 **Designer**, University of Tampere
- 1995-1997 **Research trainee**, VTT Technical Research Centre of Finland

Awards

Best doctoral thesis in Computer Science in Finland in 2009

Doctoral dissertation award by the Science Foundation of City of Tampere in 2009 (Tampereen kaupungin tiederahaston väitöskirjapalkinto 2009)

Best paper awards: ACM CHI 2009 best note award, PETMEI 2012 best paper award

Teaching experience

Pedagogical training: 10 ECTS in university pedagogy, 2016.

Lecturer in the following computer science and HCI related courses at the University of Tampere:

- 1998, responsible teacher, course: Kehittyneet ohjelmointiympäristöt
- 2003 and 2004, co-teacher, course: Graafisen käyttöliittymän suunnittelu ja arviointi
- 2005, co-teacher, seminar: Käytettävyyystutkimuksen menetelmät
- 2008, co-teacher, course: Uusien vuorovaikutustekniikoiden toteutus
- 2014 (given 2 times), responsible teacher, course: Usability Evaluation Methods
- 2014, 3h guest lecture on “New Interaction Technologies for Wellbeing” in the vocational course on “Hyvinvointia tietotekniikalla”, 14.4.2014
- 2015, responsible teacher, course: Methods of Usability Engineering - Graafisen käyttöliittymän suunnittelun työkurssi
- 2015 - 2017, responsible teacher, course: Usability Evaluation Methods
- 2016, 2017, co-teacher, course: Johdatus tietojenkäsittelytieteisiin
- 2016, 2017, responsible teacher, course: Graphical User Interface Design Project
- 2017, guest lectures on user-centered design and usability evaluation methods in the advanced training course: Teknisen viestinnän erikoistumiskoulutus, 2 full days 12-13.6.2017

Invited speaker or co-teacher in the following international summer schools or tutorials:

- Tutorial on Gaze-Based HCI, given in ACM NordiCHI 2004, and ACM IUI 2005
- Intensive Course on Gaze-Based HCI, 28-29 April 2005, Turin, Italy
- Ph.D. Course on Eye-Computer Interaction, 6-8 Sept 2006, Turin, Italy
- Ph.D. Course on Movements of the Human Eye, 7-9 March 2007, Dresden, Germany
- Summer School on Gaze, Communication, and Interactive Technology, 27-31 July 2009, Tampere, Finland
- Arcada Eye Tracker Seminar, 13 October 2010, Helsinki, Finland
- Summer School on Feedback, Communicative Gesturing and Gazing, 23-28 May 2011, Helsinki, Finland
- The European Summer School on Eye Movements, 9-13 Sept 2013, Bonn, Germany
- Full day Method Workshop on Eye Tracking in HCI, 10 Aug 2013, Lund, Sweden
- Keynote speaker at the Inferring User Action with Mobile Gaze Tracking workshop, Mobile HCI 2016, 6 Sep 2016, Florence, Italy
- Invited lecture on Eye tracking as input device, Metropolia, 14 March 2017, Helsinki, Finland

Supervision of students

Supervisor of M.Sc. students Outi Tuisku (2008), Ulla-Kaija Talvitie (2011), Johanna Hakola (2011), Jani Uusiluoto (2012), Janne Nyrhinen (2012), Tony Keisala (2013), Jingjing Zhi (2014), Karoliina Käki (2014), Konstantin Fedorov (2015), Veera Kuusikko (2017), Tommi Pirttilahti (2017), Ulla Björninen (2017), Martin Heath (2017), Anni Vuokko (2017). Currently advising several M.Sc. students. Supervisor of several past and current B.Sc. students.

Other academic merits

Pre-examiner of the doctoral dissertation of Melih Kandemir (2013, Aalto University).

Expert statement for

- Swiss National Science Foundation (2012 and 2014)
- South Africa's National Research Foundation (2015)
- Austrian Science Fund (2015)
- South African Medical Research Council (2016)

Member of the Editorial Board in Journal of Eye Movement Research (2015-)

Member of the Management Board of the COGAIN Association (2008-2011), COGAIN *vice president* (2015-). Auditor (2003-2005) and member (2001-) of ACM SIGCHI Finland. Member (2011-) and the *secretary* (2012-2014) of Finnish Society for Computer Science.

Co-organizer and *Program Committee Member* of conferences: COGAIN conferences 2005-2009; ACM ETRA 2010, 2012, 2014, 2016; EUROHAPTICS 2012; ECEM 2013. *Doctoral Symposium Chair* in ETRA 2014 & 2016.

Workshop co-organizer: PETMEI 2011 & 2012; COGAIN workshop at ECEM2013.

Reviewer for international journals: ACM Trans. on Applied Perception, ACM Trans. on Computer-Human Interaction, ACM Trans. on Interactive Intelligent Systems, ACM Trans. on Multimedia Computing, Communications and Applications, Behaviour & Information Technology, International Journal of Human-Computer Studies, Universal Access in the Information Society, PsychNology, Journal of Eye Movement Research, IEEE Systems Journal, Journal of NeuroEngineering and Rehabilitation.

Reviewer for international conferences: ACM CHI, ACM ETRA, ACM ICMI, ACM NordiCHI, ACM MobileCHI, ECEM, COGAIN, NGCA, iConference.

Leadership and research funding

Scientific officer and leader of two work packages in the COGAIN project (2004-2009).

Deputy leader of the Visual Interaction Research Group (VIRG) in 2014.

Participated in collecting research funding since 2002, particularly in co-writing applications to the Academy of Finland, National technology funding agency Tekes, European Commission, and Technology industries of Finland centennial foundation. Planning, coordinating meetings and writing research project applications was my main task during 2010-2011 in the Human-Technology Interaction programme.

Scientific and societal impact of research

Google Scholar H-index: 20, Citations: 1779; Scopus H-index: 12, Citations 647 (December 2017)

8 refereed international journal articles, 10 book chapters, 32 refereed conference articles,
1 edited book, 1 edited journal special issue, 1 refereed domestic journal article, >10 other articles

10 most cited publications according to Google Scholar (20.3.2017):

citations

1. **Majaranta**, P. and R ih a, K.-J., (2002). Twenty years of eye typing: Systems and design issues. *Proc. Eye Tracking Research & Applications, Symposium, ETRA 2002*, ACM, 15-22. 415
2. Aula, A., **Majaranta**, P., and R ih a, K.-J. (2005). Eye-tracking reveals the personal styles for search result. In: *Human-Computer Interaction - INTERACT 2005, LCNCS 3585*, Springer, 1058-1061. 129
3. **Majaranta**, P., Ahola, U.-K., and  pakov, O. (2009). Fast gaze typing with an adjustable dwell time. *Proc. 27th international Conference on Human Factors in Computing Systems, CHI 2009*, ACM, 357-360. 103
4. **Majaranta**, P. and Bulling, A. (2014). Eye tracking and eye-based human-computer interaction. In S.H. Fairclough & K. Gilleade (Eds.), *Advances in Physiological Computing* (pp. 39-65). Springer-Verlag. 96
5. **Majaranta**, P., MacKenzie, I. S., Aula, A., and R ih a, K.-J. (2006). Effects of feedback and dwell time on eye typing speed and accuracy. *Universal Access in the Information Society 5*(2), 199-208. 89
6. Hyrskykari, A., **Majaranta**, P., Aaltonen, A., and R ih a, K.-J. (2000). Design issues of iDict: a gaze-assisted translation aid. *Proc. Eye Tracking Research & Applications, ETRA 2000*, ACM, 9-14. 74
7. **Majaranta**, P. and R ih a, K.-J. (2007) Text entry by gaze: Utilizing eye-tracking. In I.S. MacKenzie & K. Tanaka-Ishii (Eds.), *Text entry systems: Mobility, accessibility, universality*. (pp. 175-187). Morgan Kaufmann. 69
8. **Majaranta**, P., Aula, A., and R ih a, K.-J. (2004). Effects of feedback on eye typing with a short dwell time. *Proc. Eye Tracking Research & Applications, ETRA2004*, ACM, 139-146. 65
9. Tuisku, O., **Majaranta**, P., Isokoski, P., and R ih a, K.-J. (2008). Now Dasher! Dash away! Longitudinal study of fast text entry by eye gaze. *Proc. Eye Tracking Research & Applications, ETRA 2008*, ACM, 19-26. 58
10. Hyrskykari, A., Ovaska, S., **Majaranta**, P., R ih a, K.-J., Lehtinen, M. (2008). Gaze path stimulation in retrospective think-aloud. *Journal of Eye Movement Research 2* (4), 1-18. 57

List of publications: <http://www.sis.uta.fi/~cspama/publications/>