

Curriculum Vitae

Personal information

Ari Juhani Korhonen
Mail address: PO Box 15400
(Konemiehentie 2), FI-00076 AALTO, Finland
Email: ari.korhonen@aalto.fi
Tel.int: +358 9 470 23387 (work)
Telefax: +358 9 470 23293 (work)
Tel.int: +358 44 519 6948 (mobile)

Education

Doctor of Science in Technology, Helsinki University of Technology (in Computer Science), 2003
Licentiate of Science in Technology, Helsinki University of Technology (in Computer Science), 2000
Master of Science in Technology, Helsinki University of Technology (in Computer Science), 1997
Languages: Finnish (native), English (fluent), Swedish (satisfactory)

Current positions

Senior Scientist, Department of Computer Science and Engineering, Aalto University School of Science, 2011–
Co-Founder (2008), CEO, By The Mark CO, 2010–



<http://www.cs.hut.fi/u/archie/>

Previous professional appointments

Researcher, Department of Computer Science and Engineering, Faculty of Information and Natural Sciences, Aalto University School of Science and Engineering¹ (2010)
Adjunct Professor in Software Visualization, Helsinki University of Technology, 2006–2011 (5 years)
Acting professor, Helsinki University of Technology, 2002 (12 mo)
Lecturing Researcher, Department of Computer Science and Engineering, Helsinki University of Technology (2000–2009)²
Researcher, Helsinki University of Technology, 1998–2000

List of instructed D.Sc. (Tech) thesis

Petri Ihantola: Automated Assessment of Programming Assignments — Visual Feedback, Assignment Mobility, and Assessment of Students' Testing Skills, D.Sc. (Tech) thesis, 2011
Mikko-Jussi Laakso: Promoting Programming Learning, D.Sc. (Tech) thesis, 2010
Ville Karavirta: Facilitating Algorithm Visualization Creation and Adoption in Education, D.Sc. (Tech) thesis, 2009
Ongoing projects: 5 doctoral students (1 thesis is under pre-examination)

Service

Member of the program committee of the Peda-forum Days (Peda-forum päivät), 2012
Chair of the 11th Koli Calling International Conference on Computing Education Research, 2011
Member of the Technical Program Committee of the 3rd and 4th IEEE International Conference on Technology for Education, T4E 2011 and 2012

¹The current *School of Science* in Aalto is the ex *Faculty of Information and Natural Sciences*

²Before 2009, *Aalto University School of Science and Engineering* was known as the *Helsinki University of Technology*

Chair of the 3rd Reflektori Symposium of Engineering Education, 2010

Member of the Program Committee of IADIS International Conference: Cognition and Exploratory Learning in Digital Age, 2010–

Member of the Steering Committee of AlgoViz Project, Virginia Tech, 2009–

Chair of the Tools Workshop in the 8th and 9th Koli Calling International Conference on Computing Education Research, Koli Calling 2008–

Member of the program committee of the (7th – 11th) Koli Calling International Conference on Computing Education Research, Koli Calling 2007–

Chair of the Special Interest Group for Teaching Computer Science, the Finnish Society for Computer Science, 2007–

Chair of the 1st – 4th Conference of the Finnish Virtual University Network on Basic Programming Studies, 2006–2008

Board member-at-large in IEEE Education Society Chapter for the Joint Norway/Denmark/Finland/Iceland/Sweden Sections, 2005–

Research interests

During the past 15 years, I have been researching science and computing education. My main interests are in developing advanced interactive learning environments and automatic assessment systems, especially for learning programming on various levels. I have directed related research projects financed by the Academy of Finland, and Technology Industries of Finland Centennial Foundation (TIFCF). Our work has also been recognized by the Ministry of Education in Finland. They have designated us three times as a national Center of Excellence in University Education for the periods 2001–2003, 2004–2006, and 2010–2012. My current research project is called “Interoperability and Social Media in CS Learning Environments”, 2011–2014 funded by TIFCF. My research group has a large number of contacts within international computing education research community, and European engineering education research community. The most active collaboration with US researchers includes developing an open framework for web-based learning environments in programming education (Prof. Cliff Shaffer, Prof. Stephen Edwards, Virginia Tech, Prof. Thomas Naps, U. of Wisconsin-Oskosh).

Selected Publications

OpenDSA: Beginning a Community Active-eBook Project. Clifford A. Shaffer, Ville Karavirta, Ari Korhonen, and Thomas L. Naps (2011) In: Proceedings of the 11th Koli Calling International Conference on Computing Education Research. pp. 112-117.

Recognizing Algorithms Using Language Constructs, Software Metrics and Roles of Variables: An Experiment with Sorting Algorithms. Ahmad Taherkhani, Ari Korhonen, and Lauri Malmi (2011) The Computer Journal, 54 (7), pp. 1049-1066.

Interaction Promotes Collaboration and Learning: Video Analysis of Algorithm Visualization Use During Collaborative Learning. Mikko-Jussi Laakso, Niko Myller, and Ari Korhonen (2010) Springer Berlin Heidelberg. Lecture Notes in Business Information Processing. vol. 45. pp. 198-211.

Characterizing research in computing education: a preliminary analysis of the literature. Lauri Malmi, Judy Sheard, Simon, Roman Bednarik, Juha Helminen, Ari Korhonen, Niko Myller, Juha Sorva, and Ahmad Taherkhani (2010) In: ICER '10: Proceedings of the Sixth international workshop on Computing education research. ACM, New York, NY, USA, pp. 3-12.

Visual Algorithm Simulation Exercise System with Automatic Assessment: TRAKLA2. Lauri Malmi, Ville Karavirta, Ari Korhonen, Jussi Nikander, Otto Seppälä, and Panu Silvasti (2004) Informatics in Education, 3 (2), pp. 267-288.

Does it Make a Difference if Students Exercise on the Web or in the Classroom?. Ari Korhonen, Lauri Malmi, Pertti Myllyselkä, and Patrik Scheinin (2002) In: Proceedings of The 7th Annual SIGCSE/SIGCUE Conference on Innovation and Technology in Computer Science Education, ITiCSE'02. ACM Press, New York, Aarhus, Denmark, pp. 121-124.