

CURRICULUM VITAE (CV)

Professor Heikki Kälviäinen

1. Personal details

- Surname: Kälviäinen. Given names: Heikki Antero. Gender: male.
- Date and place of birth: March 31, 1963, Lappee, Finland.
- Citizenship: Finland.
- <http://personal.lut.fi/users/heikki.kalviainen/>

2. Degrees

- 27/04/1994, Doctor of Science (Technology), Computer Science and Engineering, Lappeenranta-Lahti University of Technology LUT (previously named as Lappeenranta University of Technology), Finland.
- 27/09/1989, Master of Science (Technology), LUT, Lappeenranta, Finland.

3. Current employment

- 01/11/1999 to present, Professor of Computer Science and Engineering, Computer Vision and Pattern Recognition Laboratory (CVPR), previously Machine Vision and Pattern Recognition Laboratory (MVPR), School of Engineering Science, LUT.

4. Previous work experience

- 5 years in total in 2001-2017, Visiting Professor in Center for Machine Perception (CMP), Czech Technical University, and Faculty of Information Technology, Brno University of Technology, Czech Republic, Centre for Vision, Speech, and Signal Processing (CVSSP), University of Surrey, UK, School of Information Technology, Monash University Malaysia (MUM).
- 07/1995-06/1996, Visiting Research Fellow, CVSSP, University of Surrey, UK.
- 01/1995-10/1999, Associate Professor/Acting Professor, LUT.

5. Career breaks (no breaks)

6. Research funding and grants

- Research funding as a principal investigator: 50 projects and 5.868.000 EUR in total, funded by Academy of Finland, Royal Society (UK), Finnish Funding Agency for Technology and Innovation (Tekes/Business Finland), European Union (EU), and several ICT, healthcare, forest and metal industry companies.

7. Research output

- Publications: 200+ peer-reviewed scientific articles.
Number of publications categorized by the Ministry of Education and Culture: A 216, B 2, C 3, D 45, E 5, F 0, G 3, H 1, I 1; in total 276.
Number of publications as Publication Forum classes (3, 2, 1): 7, 18, 130.
See <http://personal.lut.fi/users/heikki.kalviainen/bibliography.html> for the details.
- h-index: 30 (Google Scholar), 15 (Web of Knowledge), 21 (Scopus).
Number of citations: 4800+ (Google Scholar).
- Patent application Learning Real-time Analysis and Control System for Turning, FI2009/050957 pending, filed 2009. The PapVision measuring device by LabVision Technologies, Ltd. (PapVision project). The traffic sign monitoring system by Vionice, Ltd. (TrafficVision project).

8. Research supervision and leadership experience

- Involvement in supervising postdoctoral researchers: 20 researchers.
- Number of successfully supervised theses: Doctoral theses: 26 in total (14 primary and 12 secondary); Master's theses: 153; Bachelor theses: 13.
- Leadership experience in research groups or projects: several duties since 1995.

9. Teaching merits

A university teacher since 1986, including several responsible duties in education:

- More than 100 course implementations over more than 30 academic years about 11 Bachelor, 15 Master, 8 Doctoral courses of different topics of Computer Science and Engineering, LUT/MUM/Peter the Great St. Petersburg Polytechnic University.
- Head of Graduate School/Degree Program/Major, LUT.

10. Awards and honours

- Best papers: i) IS&T Charles E. Ives Journal Award, the best journal article in 2010. Eerola, T., et al. Full Reference Printed Image Quality: Measurement Framework and Statistical Evaluation, Journal of Imaging Science and Technology. ii) Kälviäinen, H., et al., Quality Control in Tile Production. Conference of SPIE Intelligent Robots and Computer Vision XVII: Algorithms, Techniques, and Active Vision, USA, 1998.
- The best scientific author at LUT, LUT Foundation, 2004.
- Senior Member: IEEE 2012-present, SPIE 2017-present.
- Science Award, the most qualified researcher at LUT, LUT Foundation, 2019.

11. Other academic merits

- Administrative responsibilities (numerous, only the selected ones shown here): Deputy Head of School, School of Information Technology, Monash University Malaysia, 2015-2016. Vice Dean/Head of Department/Degree Program/Laboratory, LUT, Finland, 1995-2015. Director of Graduate School, the East Finland Graduate School in Computer Science and Engineering (ECSE), Director 1999-2009.
- Reviewer of the Ph.D. theses: 30 times in 6 Finnish and 7 foreign universities.
- Evaluator in filling Professor's chairs: 6 Professorships.
Evaluator in filling the title of Docent (Adjunct Professor): 9 docentships.
- Memberships and positions of trust in scientific and scholarly societies: ACM, lifetime member. International Society for Pattern Recognition (IAPR), lifetime member: IAPR governing board, member, 2006-2020. Pattern Recognition Society of Finland, lifetime member. IEEE, senior member since 2012. SPIE, lifetime senior member since 2017.
- Associate editor: 3 journals.
- Invited keynote lectures abroad: numerous lectures since 1993 in 23 countries.
- 1997, Scandinavian Conference on Image Analysis (SCIA), Finland, Local Chair. 2005, SCIA, Finland, Program Chair.
- Conference (CC) and program committees (PC): 33 conferences.
Conference session chair: 23 conferences.
Summer school chair: 3 summer schools.

12. Scientific and societal impact

- Promoting open science and research: production and distribution of research results and research data in several projects (e.g., CellVision, CoExist, COMPHI, COPEX, DigiSaw, Houghtool, ImageRet, PapVision, PulpVision, SealVision, TrafficVision).
- Leadership positions in research and education (the list of the numerous duties given above).
- Governing board of LUT, Vice Member, 2000-2001. University Collegium of LUT, Vice Member, 2010-2012, 2017-2020. IT4I Research Council, Czech Republic, Member, 2013-present.

13. Other metrics

Link to the complete CV: <http://personal.lut.fi/users/heikki.kalviainen/biography.html>