



Laitosraportti

Tilanne 02.09.2014

Yksikkö:	Tietojenkäsittelytieteen laitos
Huomioi myös alemmat organisaatiot:	Kyllä
Vuosi:	2013
Huomioi vain jos ensimmäisenä organisaationa:	Ei
Kv. yhteisjulkaisu:	Kyllä

Julkaisut

Kansainväliset tieteelliset referee-julkaisut

Alam Md Jahangir, Kinnunen Tomi, Kenny Patrick, Ouellet Pierre, O'Shaughnessy Douglas. 2013. Multitaper MFCC and PLP features for speaker verification using i-vectors. *Speech Communication* 55 2: 237-251.

Andres Moreno, Erkki Sutinen, Carolina Islas Sedano Sedano. 2013. A game concept using conflictive animations for learning programming: Andres Moreno, Erkki Sutinen, Carolina Islas Sedano Sedano, *Games Innovation Conference (GIC), 2013 IEEE International*. 175-178.

Asikainen Mikko, Haataja Keijo, Toivanen Pekka. 2013. Wireless Indoor Tracking of Livestock for Behavioral Analysis: -, *9th International Wireless Communications and Mobile Computing Conference, IWCMC 2013, 1-5 July 2013*. 1833-1838.

Bada Joseph Kizito, Laamanen Mikko, Miirio Edward. 2013. A project-based learning approach for teaching robotics to undergraduates. *Makeere Journal of Higher Education - The International Journal of Theory, Policy and Practice* 5 1: 35-48.

Bednarik R, Eivazi S, Vrzakova H. 2013. A Computational Approach for Prediction of Problem-Solving Behavior Using Support Vector Machines and Eye-Tracking Data: Yukiko I. Nakano, Cristina Conati, Thomas Bader, *Eye Gaze in Intelligent User Interfaces Gaze-based Analyses, Models and Applications*. 111-134.

Bednarik R, Gowases T, Tukiainen M. 2013. Gaze-augmented interaction improves problem-solving: new evidence from verbal protocols. *BEHAVIOUR & INFORMATION TECHNOLOGY* 32 8: 836-844.

Bednarik Roman, Kauppinen Marko. 2013. Unravelling the interaction strategies and gaze in collaborative learning with online video lectures: -, *Proceedings of the 6th workshop on Eye gaze in intelligent human machine interaction: gaze in multimodal interaction (GazeIn '13)*. 57-62.

Behravan Hamid, Hautamäki Ville, Kinnunen Tomi. 2013. Foreign Accent Detection from Spoken Finnish Using i-Vectors: -, *Proceedings of INTERSPEECH 2013, 14th Annual Conference of the International Speech Communication Association, Lyon, France, 25-29 August, 2013*. 79-83.

Comas C., Mehtätalo L., Miina J. 2013. Analysing space-time tree interdependencies based on individual tree growth functions. *Stochastic Environmental Research and Risk Assessment* 27 7: 1673-1681.

Dai Yue, Kakkonen Tuomo, Arendarenko Ernest, Liao Ding, Sutinen Erkki. 2013. MOETA - a novel text-mining model for collecting and analyzing competitive intelligence. *International Journal of Advanced Media and Communication* 5 1: 19-39.

Duveskog Marcus, Laine Teemu H, Arevalo Javier, Räisänen Ville, Kirongo Balozzi, Orina Andrew. 2013. EntVenture - From Binary Trees to Kenyan Forests: An Android Game Designed by Students: Cunningham, P. Cunningham, M. (edit), *IST-Africa 2013 Conference Proceedings, 29-31 May, 2013, Nairobi, Kenya*. -.

Duveskog Marcus, Sutinen Erkki. 2013. Enriching student HIV awareness by digital storytelling. *Journal of*

Educational Multimedia and Hypermedia 22 4: 383-406.

Duveskog Marcus, Sutinen Erkki, Cronje Johannes. 2013. Design milieux for learning environments in African contexts. *British Journal of Educational Technology* 44 6: Article first published online: 15 MAY 2013.

Erkut Cumhur, Bednarik Roman, Mäkelä Susanne, Kleimola Jari. 2013. Apps for Me, Too: Gaze and Natural Interaction Applications for Varying Cognitive Strengths on a MultitouchTable Network: -, CHI 2013 Workshop on "Gaze Interaction in the Post-WIMP World", April 27, 2013, Paris, France. -.

Evans Nicholas, Kinnunen Tomi, Yamagishi Junichi. 2013. Spoofing and countermeasures for automatic speaker verification: -, *Proceedings of INTERSPEECH 2013, 14th Annual Conference of the International Speech Communication Association, Lyon, France, 25-29 August, 2013.* 925-929.

Finta Csapa, Teppola Pekka, Juuti Mikko, Toivanen Pekka. 2013. Feasibility of parallel algorithms and graphics processing unit acceleration in chemical imaging. *CHEMOMETRICS AND INTELLIGENT LABORATORY SYSTEMS* 127: 132-138.

Flinkman M, Laamanen H, Tuomela J, Vahimaa P, Hauta-Kasari M. 2013. Eigenvectors of optimal color spectra. *JOURNAL OF THE OPTICAL SOCIETY OF AMERICA A* 30 9: 1806-1813.

Fredriksson Kimmo, Braithwaite Billy. 2013. Quicker Similarity Joins in Metrics Spaces, Similarity Search and Applications. *Springer Berlin Heidelberg. Lecture Notes in Computer Science* 8199. 127-140.

Fredriksson Kimmo, Grabowski Szymon. 2013. Exploiting word-level parallelism for fast convolutions and their applications in approximate string matching. *European Journal of Combinatorics* 34: 38-51.

Gain Ulla, Hotti Virpi. 2013. Big Data Analytics for Professionals, Data-milling for Laypeople. *World Journal of Computer Application and Technology* 1 2: 51-57.

Gebejes Ana; Domingo, Miguel Angel Martinez ; Heikkinen, Ville ; Tomic, Ivana. 2013. Reflectance recovery for coated printed color samples via multiangular RGB camera measurements: Jon Yngve Hardeberg, Marius Pedersen (editors), *Proceedings of Colour and Visual Computing Symposium (CVCS), 2013,*. 1-6.

Giaquinta Emanuele, Fredriksson Kimmo, Grabowski Szymon, Ukkonen Esko. 2013. Motif Matching Using Gapped Patterns: Lecroq Thierry, Mouchard Laurent, *Combinatorial Algorithms.* Springer. *Lecture Notes in Computer Science* 8288. 448-452.

Giaquinta Emanuele, Grabowski Szymon, Fredriksson Kimmo. 2013. Approximate pattern matching with k-mismatches in packed text. *INFORMATION PROCESSING LETTERS* 113: 693-697.

González Hautamäki Rosa, Hautamäki Ville, Rajan Padmanabhan, Kinnunen Tomi. 2013. Merging human and automatic system decisions to improve speaker recognition performance: -, *Proceedings of INTERSPEECH 2013, 14th Annual Conference of the International Speech Communication Association, Lyon, France, 25-29 August, 2013.* 2519-2523.

Gonzales Hautamäki Rosa, Kinnunen Tomi, Hautamäki Ville, Leino Timo, Laukkanen Anne-Maria. 2013. I-vectors meet imitators: on vulnerability of speaker verification systems against voice mimicry: -, *Proceedings of INTERSPEECH 2013, 14th Annual Conference of the International Speech Communication Association, Lyon, France, 25-29 August, 2013.* 930-934.

Haataja Keijo, Hyppönen Konstantin, Pasanen Sanna, Toivanen Pekka. 2013. Bluetooth Security Attacks: Comparative Analysis, Attacks, and Countermeasures. *SpringerBriefs in Computer Science.*

Hanilci Cemal, Kinnunen Tomi, Rajan Padmanabhan, Pohjalainen Jouni, Alku Paavo, Ertas Figen. 2013. Comparison of Spectrum Estimators in Speaker Verification: Mismatch Conditions Induced by Vocal Effort: -, *Proceedings of INTERSPEECH 2013, 14th Annual Conference of the International Speech Communication Association, Lyon, France, 25-29 August, 2013.* 2881-2885.

Hanilci Cemal, Kinnunen Tomi, Saeidi, Rahim, Pohjalainen Jouni, Alku Paavo, Ertas Figen. 2013. Speaker identification from shouted speech: analysis and compensation: -, *The 38th International Conference on Acoustics, Speech, and Signal Processing (ICASSP), May 26-31, 2013, Vancouver, Canada.* IEEE, Signal Processing Society. *IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL*

PROCESSING. 8027-8031.

Harfield Antony, Jormanainen Ilkka, Rungrattanaubol Jaratsri, Pattaranit Ratchada. 2013. An Open Monitoring Environment for Primary School Children Engaged in Tablet-based Learning: -, Proceedings of the 2013 10th International Joint Conference on Computer Science and Software Engineering, JCSSE 2013. 195-199.

Hassinen Marko, Marttila-Kontio Maija, Päivinen Niina. 2013. Data Security Design as a Cooperation Facilitator, Data Security Architecture for Information Systems of Safety and Security Organisations: -, The Third International Conference on Digital Information and Communication Technology and its Applications (DICTAP2013), Czech Republic on July 8-10, 2013. 170-175.

Hautamäki Ville, Cheng You-Chi, Rajan Padmanabhan, Lee Chin-Hui. 2013. Minimax i-vector extractor for short duration speaker verification: -, Proceedings of INTERSPEECH 2013, 14th Annual Conference of the International Speech Communication Association, Lyon, France, 25-29 August, 2013. 3708-3712.

Hautamäki Ville, Kinnunen Tomi, Sedlák Filip, Lee Kong Aik, Ma Bin, Li Haizhou. 2013. Sparse Classifier Fusion for Speaker Verification. IEEE Transactions on Audio, Speech, and Language Processing 21 8: 1622-1631.

Hautamäki Ville, Lee Kong Aik, van Leeuwen David, Saeidi Rahim, Larcher Anthony, Kinnunen Tomi, Hasan Taufiq, Sadjadi Seyed Omid, Liu Gang, Boril Hynek, Hansen John H. L., Fauve Benoit. 2013. Automatic Regularization of Cross-entropy Cost for Speaker Recognition Fusion: -, Proceedings of INTERSPEECH 2013, 14th Annual Conference of the International Speech Communication Association, Lyon, France, 25-29 August, 2013. 1609-1613.

Heikkinen Sanna, Suhonen Antti, Kurenniemi Mika, Jäntti Marko. 2013. Creating a ITIL-based Software Incident Categorization Model for Measurement: A Case Study: Lavazza, L. Oberhauser, R. Martin, A. Hassine, J. Gebhart, M. Jäntti, M. (toim.), Proceedings of the Eight International Conference on Software Engineering Advances (ICSEA 2013), October 27 - November 1, 2013, Venice, Italy. 450-456.

Heikkinen Ville, Mirhashemi Arash, Alho Juha. 2013. Link functions and Matérn kernel in the estimation of reflectance spectra from RGB responses. JOURNAL OF THE OPTICAL SOCIETY OF AMERICA A 30 11: 2444-2454.

Hiekkanen Kari, Mykkänen Juha, Korhonen Janne J, Collin Jari, Patricio Elisabete, Helenius Mika. 2013. Architects' perceptions on EA use - An Empirical Study: Erik Proper, Proceedings of the 15th IEEE Conference on Business Informatics (CBI 2013).IEEE. IEEE Xplore 13874634. 292-297.

Hirvonen Tapani, Penttinen Niko, Hauta-Kasari Markku, Sorjonen Mika ja Peiponen Kai-Erik. 2013. A Wide Spectral Range Reflectance and Luminescence Imaging System. Sensors 13 11: 14500-14510.

Huang Zhen, Cheng You-Chi, Li Kehuang, Hautamäki Ville, Lee Chin-Hui. 2013. A Blind Segmentation Approach to Acoustic Event Detection Based on I-Vector: -, Proceedings of INTERSPEECH 2013, 14th Annual Conference of the International Speech Communication Association, Lyon, France, 25-29 August, 2013. 2282-2286.

Ikonen Tiia, Haataja Keijo, Toivanen Pekka. 2013. 3D Imaging of Human Brain in the Diagnostics of Insomnia and Depression: a Comparative Analysis, a Novel Insomnia/Depression Diagnostics Approach, and Lessons Learned: Ajith Abraham, Md Nasir Sulaiman, Lilly Suriani Affendey, Dickson Lukose, Emilio Corchado, Choo Yun Huoy, Kun Ma, Proceedings of the 2013 International Conference on Intelligent Systems Design and Applications (ISDA 2013). 230-235.

Islas Sedano C, Carvalho MB, Secco N, Longstreet CS. 2013. Collaborative and cooperative games: Facts and assumptions: Waleed W. Smari & Geoffrey C. Fox, Collaboration Technologies and Systems (CTS), 2013 International Conference on. 370 - 376.

Islas Sedano Carolina, Leendertz Verona, Vinni Mikko, Sutinen Erkki, Ellis Suria. 2013. Hypercontextualized Learning Games: Fantasy, Motivation and Engagement in Reality. Simulation & Gaming 44 6: 821-845.

Jormanainen Ilkka, Sutinen Erkki. 2013. An open approach for learning educational data mining: Mikko-Jussi Laakso, Proceedings of the 13th Koli Calling International Conference on Computing Education Research.ACM. ACM International Conference Proceeding Series -. 203-204.

- Jäntti Marko. 2013. Exploring Self-Service Support Methods in IT Service Management: Cai, X. Chen, J. Jia, J. Xiao, Y. Zhou, S., Proceedings of 10th International Conference on Service Systems and Service Management (ICSSSM) July 17-19, 2013, Hong Kong, China. 179-184.
- Jäntti Marko, Rout Terry. 2013. Improving IT Service Operation Processes, Product-Focused Software Process Improvement. Springer Berlin Heidelberg 7983. 359-362.
- Jäntti Marko, Rout Terry, Wen Lian, Heikkinen Sanna, Cater-Steel Aileen. 2013. Exploring the Impact of IT Service Management Process Improvement Initiatives: A Case Study Approach. Communications in Computer and Information Science 349: 176-187.
- Jäntti Marko, Suhonen Antti, Kurenniemi Mika. 2013. Managing IT Service Releases in a Systematic Way: A Case Study Approach: Lavazza, L. Oberhauser, R. Martin, A. Hassine, J. Gebhart, M. Jäntti, M. (toim.), Proceedings of the Eight International Conference on Software Engineering Advances (ICSEA 2013), October 27 - November 1, 2013, Venice, Italy. 304-309.
- Kankuzi Bennett, Sajaniemi Jorma. 2013. An Empirical Study of Spreadsheet Authors' Mental Models in Explaining and Debugging Tasks: Kelleher, C. Burnett, M. Sauer, S., Visual Languages and Human-Centric Computing (VL/HCC), 2013 IEEE Symposium on. 15-18.
- Kilpeläinen Jouni, Räisänen Mikko, Mehtätalo Lauri, Sutinen Sirkka, Rummukainen Aino, Repo Tapani, Lehto Tarja. 2013. The longevity of Norway spruce responses to boron fertilisation. FOREST ECOLOGY AND MANAGEMENT 307: 90-100.
- Kinnunen Päivi, Marttila-Kontio Maija, Pesonen Erkki. 2013. Getting to know computer science freshmen: -, Proceedings of the 13th Koli Calling International Conference on Computing Education Research. 59-66.
- Kinnunen Tomi, Alam Md. Jahangir, Matejka Pavel, Kenny Patrick, Cernocky Jan "Honza", O'Shaughnessy Douglas. 2013. Frequency Warping and Robust Speaker Verification: A Comparison of Alternative Mel-Scale Representations: -, Proceedings of INTERSPEECH 2013, 14th Annual Conference of the International Speech Communication Association, Lyon, France, 25-29 August, 2013. 3122-3126.
- Kinnunen Tomi, Rajan Padmanabhan. 2013. A practical, self-adaptive voice activity detector for speaker verification with noisy telephone and microphone data: -, The 38th International Conference on Acoustics, Speech, and Signal Processing (ICASSP), May 26-31, 2013, Vancouver, Canada. IEEE, Signal Processing Society. IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING. 7229-7233.
- Korhonen L, Pippuri I, Packalén P, Heikkinen V, Maltamo M, Heikkilä J. 2013. Detection of the need for seedling stand tending using high-resolution remote sensing data. SILVA FENNICA 47 2: 952.
- Korpela Mikko. 2013. Two decades of HELINA conferences: A historical review of health informatics in Africa. YEARBOOK OF MEDICAL INFORMATICS 8 1: 197-205.
- Korpela Mikko, Ikävalko Pauliina, Luukkonen Irmeli, Martikainen Susanna, Palmén Marilla, Tiihonen Tuija, Toivanen Marika, Vainikainen Vilma. 2013. How to Co-Develop Services, Work, and Information Systems in Healthcare: The Daisy Approach: Beuscart-Zépher. M-C., Jaspers, M. Kuziemsky, C. Nøhr, C. Aarts, J., Context Sensitive Health Informatics: Human and Sociotechnical Approaches. Studies in Health Technology and Informatics 194. 126-132.
- Kähärä Timo, Haataja Keijo, Toivanen Pekka. 2013. A Novel Recommendation System Approach Utilizing Social Network Profiles: -, Proceedings of the 2013 Thirteenth International Conference on Hybrid Intelligent Systems (HIS 2013). 156-161.
- Kähärä Timo, Haataja Keijo, Toivanen Pekka. 2013. Towards More Accurate and Intelligent Recommendation Systems: -, Proceedings of the 2013 International Conference on Intelligent Systems Design and Applications (ISDA 2013). 165-171.
- Li Yuan, Ji Chunlei, Xu Mantao. 2013. Nested Quantum Error Correction Codes via Subgraphs. International Journal of Theoretical Physics 53 2: 390-396.
- Lintula Heli, Leinonen Paula, Hotti Virpi. 2013. Semantic Documents - Example for CCTS-Based and

- RDFa-Annotated XHTML Documents: Siricharoen W.V., The International Conference on E-Technologies and Business on the Web (EBW2013), Bangkok, Thailand, May 7-9, 2013. 120-125.
- Luukkonen Irmeli. 2013. Activity-Driven Needs Analysis and Modeling in Healthcare information systems development. Finnish Journal of eHealth and eWelfare 5 2-3: 106-112.
- Luukkonen Irmeli, Toivanen Marika, Mursu Anja, Saranto Kaija, Korpela Mikko. 2013. Researching an Activity-Driven Approach to Information Systems Development: Cruz-Cunha, M.M. Miranda, I.M. Goncalves, P. (edit.), Handbook of Research on ICTs and Management Systems for Improving Efficiency in Healthcare and Social Care. 431-450.
- Lång Juha, Mäkisalo Jukka, Gowases Tersia, Pietinen Sami. 2013. Using Eye Tracking to Study the Effect of Badly Synchronized Subtitles on the Gaze Paths of Television Viewers. New Voices in Translation Studies 10: 72-86.
- Makola David, Hotti Virpi. 2013. Critical Success Factors for Adopting Enterprise Architecture Metamodels in the Health Sector: Literature Review. Journal of Health Informatics in Africa 1 1: -.
- Melin Markus, Packalen Petteri, Matala Juho, Mehtätalo Lauri, Pusenius Jyrki. 2013. Assessing and modeling moose (*Alces alces*) habitats with Airborne laser scanning data. INTERNATIONAL JOURNAL OF APPLIED EARTH OBSERVATION AND GEOINFORMATION 23: 389-396.
- Moreno Andres, Joy Mike, Sutinen Erkki. 2013. Roles of animation tools in understanding programming concepts. Journal of Educational Multimedia and Hypermedia 22 2: 165-184.
- Mostert-Phipps Nicky, Pottas Dalenca, Korpela Mikko. 2013. Guidelines to encourage the adoption and meaningful use of health information technologies in the South African healthcare landscape: Lehmann CU, Ammenwerth E, Nøhr C, MEDINFO 2013: Proceedings of the 14th World Congress on Medical and Health Informatics.IOS. Studies in Health Technology and Informatics 192. 147-151.
- Mowlae Pejman, Saeidi Rahim. 2013. Iterative Closed-Loop Phase-Aware Single-Channel Speech Enhancement. IEEE SIGNAL PROCESSING LETTERS 20 12: 1235-1239.
- Munezero Myriam, Kakkonen Tuomo, Islas Sedano Carolina, Sutinen Erkki, Suero Montero Calkin. 2013. EmotionExpert: Facebook Game for Crowdsourcing Annotations for Emotion Detection: -, IEEE International Games Innovation conference (IGIC) 23-25 September 2013, Vancouver, BC, Canada. International IEEE Consumer Electronics Society's Games Innovations Conference. 179-186.
- Munezero Myriam, Mozgovoy Maxim, Kakkonen Tuomo, Klyuev Vitaly, Sutinen Erkki. 2013. Antisocial Behavior Corpus for Harmful Language Detection: -, The Federated Conference On Computer Science and Information Systems (FedCSIS), 8-11 September 2013, Kraków, Poland. 261-265.
- Munezero Myriam, Suero Montero Calkin, Mozgovoy Maxim, Sutinen Erkki. 2013. Exploiting Sentiment Analysis to Track Emotion in Student's Learning Diaries: -, Proceedings of the 13th Koli Calling International Conference on Computing Education Research, 14-17 November 2013, Koli, Finland. 145-152.
- Mykkänen Juha, Virkanen Hannu, Tuomainen Mika. 2013. Governance of Extended Lifecycle in Large-Scale eHealth Initiatives: Analyzing Variability of Enterprise Architecture Elements, Medinfo 2013 - Proceedings of the 14th World Congress on Medical and Health Informatics. 1113.
- Mäkelä, Susanne; Bednarik, Roman; Tukiainen, Markku. 2013. Evaluating user experience of autistic children through video observation: Mackay, W.E., Brewster, S., Bødker, S., ACM SIGCHI Conference on Human Factors in Computing Systems. 463-468.
- Nanavati A.A., Rajput N., Srivastava Saurabh, Erkut Cumhurt, Jylha Antti, Rudnicky Alexander I., Serafin Stefania, Turunen M. 2013. SiMPE: 8th workshop on speech and sound in mobile and pervasive environments: Michael Rohs, Albrecht Schmidt, Daniel Ashbrook, Enrico Rukzio, MobileHCI 2013 - Proceedings of the 15th International Conference on Human-Computer Interaction with Mobile Devices and Services, August 27-30, 2013, Munich, Germany. 626-629.
- Nevalainen Jaana, Savolainen Paula, Ahonen Jarmo. 2013. Will the software development project be a success? The supplier perspective: Messnarz, R. Ekert, D. Johansen, J. Christol, E. (toim.), EuroSPI² 2013 Industrial Proceedings 20 th EuroSPI Conference 25.-28. June 2013, Dundalk, Ireland. 2.13-2.21.

- Nummenmaa Jyrki, Marttila-Kontio Maija, Nummenmaa Timo. 2013. Checking visual data flow programs with finite process models: Kiss. A, Proceedings of 13th Symposium on Programming Languages and Software Tools SPLST'13, Szeged, Hungary, August 26-27, 2013. 245-258.
- Paras Pant, Ville Heikkinen, Aarne Hovi, Ilkka Korpela, Markku Hauta-Kasari, Timo Tokola. 2013. Evaluation of simulated bands in airborne optical sensors for tree species identification. *Remote Sensing of Environment* 138: 27-37.
- Postma Louise, Blignaut A. Seugnet, Swan Karen, Sutinen Erkki. 2013. Reflections on the Use of Grounded Theory to Uncover Patterns of Exclusion in an Online Discussion Forum at an Institution of Higher Education. *International Journal of Qualitative Methods* 12: 529-550.
- Rahaman A. G. M., Parkkinen J., Hauta-Kasari M., Norberg O. 2013. Retinal Spectral Image Analysis Methods Using Spectral Reflectance Pattern Recognition: Shoji Tominaga, Raimondo Schettini, Alain Trémeau, Computational Color Imaging - 4th International Workshop, CCIW 2013, Chiba, Japan, March 3-5, 2013. *Lecture Notes in Computer Science* 7786. 224-238.
- Rajan Padmanabhan, Kinnunen Tomi, Hanilci Cemal, Pohjalainen Jouni, Alku Paavo. 2013. Using group delay functions from all-pole models for speaker recognition: -, Proceedings of INTERSPEECH 2013, 14th Annual Conference of the International Speech Communication Association, Lyon, France, 25-29 August, 2013. 2489-2493.
- Rajan Padmanabhan, Kinnunen Tomi, Hautamäki Ville. 2013. Effect of multicondition training on i-vector PLDA configurations for speaker recognition: -, Proceedings of INTERSPEECH 2013, 14th Annual Conference of the International Speech Communication Association, Lyon, France, 25-29 August, 2013. 3694-3697.
- Saeidi R., Lee K.A., Kinnunen T., Hasan T., Fauve B., Bousquet P.-M., Khoury E., Sordo Martinez P.L., Kua J.M.K., You C.H., Sun H., Larcher A., Rajan P., Hautamäki V., Hanilci C., Braithwaite B., Gonzales-Hautamäki R., Sadjadi S.O., Liu G., Boril H. et.al.. 2013. I4U submission to NIST SRE 2012: A large-scale collaborative effort for noise-robust speaker verification: -, Proceedings of INTERSPEECH 2013, 14th Annual Conference of the International Speech Communication Association, Lyon, France, 25-29 August, 2013. 1986-1990.
- Schleusing Olaf, Kinnunen Tomi, Story Brad, Vesin Jean-Marc. 2013. Joint Source-Filter Optimization for Accurate Vocal Tract Estimation Using Differential Evolution. *IEEE Transactions on Audio, Speech, and Language Processing* 21 8: 1560-1572.
- Shahram Eivazi. 2013. Measuring situation awareness of micro-neurosurgeons: -, Proceedings of International Conference on Intelligent User Interfaces IUI'13 Compani, March 19-22, 2013, Santa Monica, CA, USA. 5-7.
- Siipilehto Jouni, Mehtätalo Lauri. 2013. Parameter recovery vs. parameter prediction for the Weibull distribution validated for Scots pine stands in Finland. *SILVA FENNICA* 47 4: x-x.
- Silvennoinen Martti, Penttinen Niko, Hason Stanislav, Silvennoinen Raimo. 2013. Optical anisotropic reflectance from W720 LIPSS surface: Igor Gurov, 3RD INTERNATIONAL TOPICAL MEETING ON OPTICAL SENSING AND ARTIFICIAL VISION: OSAV'2012. AIP conference proceedings. 178-184.
- Suero Montero Calkin, Suhonen Jarkko, Dai Yue. 2013. Design Research: Meaningful Computer Science Research Agenda at edTechΔ: ACM, AcademicMindTrek '13 Proceedings of International Conference on Making Sense of Converging Media. 331-333.
- Suhonen Antti, Heikkinen Sanna, Kurenniemi Mika, Jäntti Marko. 2013. Implementation of the ITIL-Based Service Level Management Process to Improve an Organizarion's Efficiency: A Case Study: Lavazza, L. Oberhauser, R. Martin, A. Hassine, J. Gebhart, M. Jäntti, M. (toim.), Proceedings of the Eight International Conference on Software Engineering Advances (ICSEA 2013), October 27 - November 1, 2013, Venice, Italy. 457-464.
- Sun Xin, Liu Yanheng, Xu Mantao, Chen Huiling, Han Jiawei, Wang Kunhao. 2013. Feature selection using dynamic weights for classification. *Knowledge-Based Systems* 37: 541-549.
- Sun Xin, Liu Yanheng, Wei Da, Xu Mantao, Chen Huiling, Han Jiawei. 2013. Selection of interdependent

genes via dynamic relevance analysis for cancer diagnosis. *Journal of Biomedical Informatics* 46 2: 252-258.

Sutinen Erkki. 2013. Emerging Dimensions of Learning: Huang, R. Spector, J.M. (eds.), *Reshaping Learning, Frontiers of Learning Technology in a Global Context*. New Frontiers of Educational Research 2013 XVII. 43-69.

Tabarcea Andrei, Wan Zhentian, Waga Karol, Fränti Pasi. 2013. O-Mopsi: Mobile Orienteering Game using Geotagged Photos: -, 9th International Conference on Web Information Systems and Technologies (WEBIST 2013), 8-10 May, 2013, Aachen, Germany. 300-303.

Thien Pham Cong, Phan Le Van, Loi Nguyen Kim, Tho Quan Thanh, Suhonen Jarkko, Sutinen Erkki. 2013. Applying Edmodo to Serve an Online Distance Learning System for Undergraduate Students in Nong Lam University, Vietnam: Patil Arun, Puteh Marlia, Nair Cheniceri Sid, *Proceedings of the 2nd International Engineering and Technology Education Conference*. 15 pages.

Toroi Tanja, Raninen Anu, Vainio Hannu, Väätäinen Lauri. 2013. Identifying Process Problems with the SAWO Functional Defect Classification Scheme. *Communications in Computer and Information Science* 364: 72-83.

Toroi Tanja, Raninen Anu, Väätäinen Lauri. 2013. Identifying Process Improvement Targets in Test Processes: A Case Study: -, 29th IEEE International Conference on Software Maintenance (ICSM 2013), 22-28 September 2013, Eindhoven, The Netherlands. IEEE. *IEEE International Conference on Software Maintenance* -. 11-18.

Waga Karol, Tabarcea Andrei, Mariescu-Istodor Radu, Fränti Pasi. 2013. Real Time Access to Multiple GPS Tracks: -, 9th International Conference on Web Information Systems and Technologies (WEBIST 2013), 8-10 May, 2013, Aachen, Germany. 293-299.

Valbuena Ruben, Packalen Petteri, Mehtätalo Lauri, Garcia-Abril Antonio, Maltamo Matti. 2013. Characterizing forest structural types and shelterwood dynamics from Lorenz-based indicators predicted by airborne laser scanning. *CANADIAN JOURNAL OF FOREST RESEARCH* 43 11: 1063-1074.

Vauhkonen Jari, Mehtätalo Lauri. 2013. Rethinking single-tree remote sensing: Histogram matching of remotely sensed and field-measured tree size distributions, *Abstract book of the Finnish Remote Sensing Days 2013*, 23-24 October, Espoo, Finland. 19.

Vidgren Niko, Haataja Keijo, Patiño-Andres José Luis, Ramírez-Sanchis Juan José, Toivanen Pekka. 2013. Security Threats in ZigBee-Enabled Systems: Vulnerability Evaluation, Practical Experiments, Countermeasures, and Lessons Learned: -, 46th IEEE Hawaii International Conference on System Sciences (HICSS-46). 5132-5138.

Virkanen Hannu, Mykkänen Juha, Tuomainen Mika. 2013. Interface Map as a User-Driven and Activity-Driven Interoperability Standards Portfolio: Christoph Ulrich Lehmann, Elske Ammenwerth, Christian Nohr, *Medinfo 2013 - Proceedings of the 14th World Congress on Medical and Health Informatics*. IOS Press. *Studies in Health Technology and Informatics* 192. 407-411.

Vrzakova Hana. 2013. Inferential methods in interaction, usability and user experience: Wendy E. Mackay, Stephen Brewster, Susanne Bødker, *CHI EA '13 CHI '13 Extended Abstracts on Human Factors in Computing Systems*. 1965-1968.

Vrzáková Hana. 2013. Computational approaches to visual attention for interaction inference: Jihie Kim, Jeffrey Nichols, Pedro Szekely, *IUI '13 Companion Proceedings of the companion publication of the 2013 international conference on Intelligent user interfaces companion*. 37-40.

Vrzakova Hana, Bednarik Roman. 2013. Fast and Comprehensive Extension to Intention Prediction from Gaze: Dirk Schnelle-Walka, Jochen Huber, Roman Lissermann, Oliver Brdiczka, Kris Luyten, Max Mühlhäuser, *Proceedings of the 2nd IUI Workshop on Interacting with Smart Objects*. 34-39.

Vrzakova Hana, Bednarik Roman. 2013. That's not norma(n/I): a detailed analysis of midas touch in gaze-based problem-solving: Wendy E. Mackay, Stephen Brewster, Susanne Bødker, *CHI EA '13 CHI '13 Extended Abstracts on Human Factors in Computing Systems*. 85-90.

Vrzakova Hana; Bednarik Roman. 2013. EyeCloud: Cloud Computing for Pervasive Eye-Tracking: *Bulling*

Andreas, Bednarik Roman, 3rd International Workshop on Pervasive Eye Tracking and Mobile Eye-Based Interaction. 4.

Wu, Zhengzhe; Heikkinen, Ville; Hauta-Kasari, Markku; Parkkinen, Jussi. 2013. Segmentation of Skin Spectral Images Using Simulated Illuminations: Richard Wilson, Edwin Hancock, Adrian Bors, William Smith, 15th International Conference on Computer Analysis of Images and Patterns, CAIP 2013, York, UK, August 27-29, 2013. Lecture Notes in Computer Science 8048. 274-281.

Wu, Zhengzhe; Heikkinen, Ville; Hauta-Kasari, Markku; Parkkinen, Jussi; Tokola, Timo. 2013. Forest Stand Delineation Using a Hybrid Segmentation Approach Based on Airborne Laser Scanning Data: Kamarainen, Joni-Kristian; Koskela, Markus, 18th Scandinavian Conference on Image Analysis, SCIA 2013, Espoo, Finland, June 17-20, 2013. Lecture Notes in Computer Science 7944. 95-106.

Wu Zhizheng, Larcher Anthony, Lee Kong Aik, Shng Eng Siong, Kinnunen Tomi, Li Haizhou. 2013. Vulnerability evaluation of speaker verification under voice conversion spoofing: the effect of text constraints: -, Proceedings of INTERSPEECH 2013, 14th Annual Conference of the International Speech Communication Association, Lyon, France, 25-29 August, 2013. 950-954.

Wu Zhizheng, Virtanen Tuomas, Kinnunen Tomi, Chng Eng Siong, Li Haizhou. 2013. Exemplar-based unit selection for voice conversion utilizing temporal information: -, Proceedings of INTERSPEECH 2013, 14th Annual Conference of the International Speech Communication Association, Lyon, France, 25-29 August, 2013. 3057-3061.

Wu Zhizheng, Virtanen Tuomas, Kinnunen Tomi, Chng Eng Siong, Li Haizhou. 2013. Exemplar-based voice conversion using non-negative spectrogram deconvolution: -, 8th ISCA Speech Synthesis Workshop (SSW'13), August 31 - September 2, 2013, Barcelona, Spain. 201-206.

Yang Guanbing, Chen Nian-Shing, Kinshuk, Sutinen Erkki, Anderson Terry, Wen Dunwei. 2013. The effectiveness of automatic text summarization in mobile learning contexts. Computers & Education 68: 233-243.

Yang Guanbing, Kinshuk, Wen Dunwei, Sutinen Erkki. 2013. A Contextual Query Expansion Based Multi-document Summarizer for Smart Learning: Tsuruta Setsuo, Damiani Ernesto, Proceedings of IEEE 9th International Conference on Signal-Image Technology & Internet-Based Systems. 1010-1016.

Yang Guanbing, Kinshuk, Wen Dunwei, Sutinen Erkki. 2013. Enhancing Sentence Ordering by Hierarchical Topic Modeling for Multi-document Summarization: F. Castro, A. Gelbukh, M.G. Mendoza, 12th Mexican International Conference, MICAI 2013, Lecture Notes in Computer Science, Vol. 8265. 367-379.

Yue Dai, Calkin Suero Montero, Tuomo Kakkonen, Mohsen Nasiri, Erkki Sutinen, Mina Kim, Taina Savolainen. 2013. TrustAider - Enhancing Trust in e-Leadership: Abramowicz, Witold (Ed.), Business Information Systems. Springer. Lecture Notes in Business Information Processing Vol 157, 2013 XIV, 223p, 71 illus. 26-37.

Zhong Caiming, Malinen Mikko, Miao Duoqian, Fränti Pasi. 2013. Fast Approximate Minimum Spanning Tree Algorithm Based on K-Means, Computer Analysis of Images and Patterns. Springer Berlin Heidelberg. Lecture Notes in Computer Science 8047. 262-269.

Kotimaiset tieteelliset referee-julkaisut

Lintula Heli, Hotti Virpi, Leinonen Paula. 2013. Sosiaalihuollon avoin asiakastietomalli ja sen kehittämisessä ja soveltamisessa käytetyt standardit. Finnish Journal of eHealth and eWelfare 5 2-3: 94-105.

Mostert-Phipps Nicky, Pottas Dalenca, Korpela Mikko. 2013. A South African perspective on factors that impact on the adoption and meaningful use of health information technologies. South African Family Practice 55 6: 545-554.

Roy Amit, Suhonen Jarkko, Vesisenaho Mikko. 2013. Children as agents of social change: A technology-supported pedagogical framework: Härkönen Ulla, Reorientation of teacher education towards sustainability through theory and practice. Proceedings of the 10th International JTEFS/BBC Conference, Sustainable development, culture, education. University of Eastern Finland. Publications of the University of Eastern Finland. Reports and Studies in Education, Humanities, and Theology. 7. 183-198.

Kansainväliset tieteelliset ei-referee julkaisut

Bednarik Roman, Huang Hung-Hsuan, Nakano Yukiko I., Jokinen Kristiina. 2013. Gazein'13: the 6th Workshop on Eye Gaze in Intelligent Human Machine Interaction (gaze in multimodal interaction): -, In Proceedings of the 15th ACM on International conference on multimodal interaction (ICMI'13), December 9-13, 2013, Sydney, NSW, Australia.ACM. 609-610.

Hauta-Kasari Markku. 2013. Industrial Applications of Spectral Imaging, Invited, The Tenth Japan-Finland Joint Symposium on Optics in Engineering, Technical Digest, September 2-5, 2013, Utsunomiya, Japan. 105-106.

K. Azuma, P. Fält, M. Hauta-Kasari, S. Nakauchi. 2013. Optimal Spectral Filter Design for Wood Chip Classification, The Tenth Japan-Finland Joint Symposium on Optics in Engineering, Technical Digest, September 2-5, 2013, Utsunomiya, Japan. 69-70.

Miguel Ángel Martínez-Domingo, Eva Valero, Ville Heikkinen, Giacomo Langfelder. 2013. Design of a Multispectral Imaging System Based on Transverse Field Detectors, AIC 2013 - 12th Congress of the International Colour Association (MCS2013 Symposium). 146.

R. Yamagichi, P. Fält, M. Hauta-Kasari, S. Nakauchi. 2013. Optimal Bandpass Filter Design for Diabetic Retinopathy Lesion Detection, The Tenth Japan-Finland Joint Symposium on Optics in Engineering, Technical Digest, September 2-5, 2013, Utsunomiya, Japan. 71-72.

Wu, Zhengzhe; Heikkinen, Ville; Hauta-Kasari, Markku; Parkkinen, Jussi. 2013. Detection of Intracutaneous Allergic Skin Elements Based on Near-infrared Spectral Skin Images: N.V. Smirnov, T.E. Smirnova, In XLIV International Conference Control Processes and Stability (CPS'13), St. Petersburg, Russia, April 2013.Saint-Petersburg State University. 539-544.

Kotimaiset tieteelliset ei-referee julkaisut

Korhonen L, Pippuri I, Packalén P, Heikkinen V, Maltamo M, Heikkilä J. 2013. Taimikonhoitotarpeen määrittäminen korkean resoluution kaukokartoitusaineistojen avulla. Metsätieteen aikakauskirja 2013 2: 193.

Muut julkaisut

Aki Miettinen, Juha Mykkänen, Maarit Laaksonen, Marko Suhonen, Päivi Röppänen. 2013. Asiayhteyden todentaminen sosiaalihuollon tietojärjestelmissä - Vaatimukset ja toiminnallinen määrittely, versio 2.0. Työpaperi / Terveiden ja hyvinvoinnin laitos 13/2013.

Aki Miettinen, Maarit Laaksonen, Päivi Röppänen, Juha Mykkänen. 2013. Asiayhteys ja tiedon luovutus sosiaalihuollossa - Tietojärjestelmätoteutuksia ohjaavat periaatteet. Työpaperi / Terveiden ja hyvinvoinnin laitos 10/2013.

Franzén Johanna, Hassinen Marko, Hokkanen Laura, Honkavuo Hanna, Kurki Taina, Paananen Pekka, Päivinen Niina, Sihvonen Hanna-Miina, Sipilä Matti, Soininen Jari, Voutila Juho. 2013. Kansalaiset ja uusi media apuna tilannekuvan tuottamisessa, Seminaarijulkaisu. Pelastusopiston julkaisu D-sarja: Muut julkaisut 1/2013.

Franzén Johanna, Hokkanen Laura, Honkavuo Hanna, Sihvonen Hanna-Miina, Kurki Taina, Päivinen Niina. 2013. SOME kriisiviestinnän työkaluna?. Pelastustieto 3: 36-37.

Hassinen Marko, Marttila-Kontio Maija, Päivinen Niina, . 2013. Varanto & Tietoturva, VARANTO-hankkeen tietoturvaselvitys. Pelastusopiston julkaisu, D-sarja: muut 4/2013.

Laaksonen Maarit, Suhonen Marko, Paakkanen Esa, Mykkänen Juha, Satama Riikka. 2013. Kansallinen sosiaalihuollon asiakastietovaranto (KanSa) - Yhteenveto toteutusvaihtoehdoista ja linjauksista. Työpaperi / Terveiden ja hyvinvoinnin laitos 5/2013.

Luukkonen Irmeli, Kivekäs Eija, Mykkänen Juha, Saranto Kaija. 2013. Lääkehoidon tiedonhallinta ja kehittämiskohteet. Esiselvitys Pohjois-Savossa 2013, Lääkehoidon yksilöllinen hallinta -hankkeen

tulokset.

Miettinen Aki, Röppänen Päivi, Mykkänen Juha, Laaksonen Maarit, Suhonen Marko. 2013. Asianhallinta sosiaalihuollon tietojärjestelmissä - Vaatimukset ja toiminnallinen määrittely. Työpaperi (THL) 23/2013.

Opinnäytteet

Bada Joseph Kizito. 2013. Integrating Digital Learning Objects for HIV/AIDS Prevention: A Contextualized Approach. University of Eastern Finland. Publications of the University of Eastern Finland. Dissertations in Forestry and Natural Sciences 96.

Dai Yue. 2013. Designing Text Mining-based Competitive Intelligence Systems. University of Eastern Finland. Publications of the University of Eastern Finland. Dissertations in Forestry and Natural Sciences 115.

Jormanainen Iikka. 2013. Supporting Teachers in Unpredictable Robotics Learning Environments. University of Eastern Finland. Publications of the University of Eastern Finland. Dissertations in Forestry and Natural Sciences 121.

Koirala Pesal. 2013. Simulation and Measurement of Colored Surfaces. University of Eastern Finland. Publications of the University of Eastern Finland. Dissertations in Forestry and Natural Sciences 102.

Zhong Caiming. 2013. Improvements on Graphbased Clustering Methods. University of Eastern Finland. Publications of the University of Eastern Finland. Dissertations in Forestry and Natural Sciences 114.

Patentit ja muut teollisoikeudet

Jae-hyun Kwon, Seong-deok Lee, Hyun-wook Ok, Jussi Parkkinen, Tuija Jetsu, Ville Heikkinen. 2013. System, medium, and method converting colors. 8,363,931. Yhdysvallat (USA).

Audiovisuaaliset tuotteet

Hämäläinen Wilhelmiina, Webb Geoff. 2013. Statistically Sound Pattern Discovery.

Asiantuntijatehtävät

Yhteenveto (2013)

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