

Helsinki Institute for Information Technology HIIT

Facts and Figures 2013

Appendix to the Annual Report

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Kumpula Site

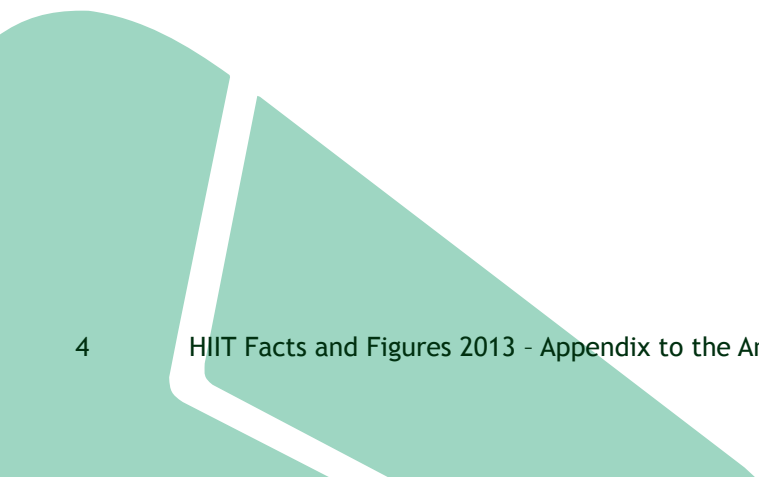
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A. Teaching and research visits

A.1. Courses given by HIIT researchers at participating departments

- Adaptive Information Systems, Peter Brusilovsky, UH
- Advanced Course in Algorithms, Petteri Kaski, Pekka Orponen, Aalto
- Advanced Course in Computational Logic, Tomi Janhunen, Aalto
- Algorithmic methods of data mining, Aristides Gionis, Aalto
- Algorithms for Bioinformatics, Alexandru Tomescu, UH
- Algorithms for Solving Problems, Antti Laaksonen, UH
- Answer Set Programming, Tomi Janhunen, Aalto
- Azure CodeCamp, Sasu Tarkoma, UH
- Bayes-päätely, Mikhail Shubin, UH
- Bayesian theory with applications, Jukka Corander, UH
- Biological Sequence Analysis, Veli Mäkinen, UH
- Clojure Programming, Juhana Laurinharju, UH
- Combinatorial Models and Stochastic Algorithms, Pekka Orponen, Aalto
- Combinatorics, Eugen Czeiler, Aalto
- Computational Genomics, Juho Rousu, Aalto
- Data Mining, Hannu Toivonen, UH
- Data Mining Project, Hannu Toivonen, UH
- Data Structures and Algorithms, Patrik Floréen, UH
- Datasta tietoon, Jaakko Hollmen, Aalto
- Design and Analysis of Algorithms, Mikko Koivisto, UH
- Discrete Models and Search, Emilia Oikarinen, Aalto
- Distributed Systems, Jussi Kangasharju, UH
- Distributed Systems Project, Liang Wang, Jussi Kangasharju, UH
- High-Throughput Bioinformatics, Elisabeth Georgii, Aalto
- Human-Computer Interaction, Giulio Jacucci, UH
- Information retrieval, Tuukka Ruotsalo, Aalto
- Information visualization, Jaakko Peltonen, Aalto
- Interactive Systems, Eve Hoggan, UH
- Interface Technologies, Antti Jylhä, UH
- Intermediate Studies Project: AI Odyssey, Teemu Roos, Tony Kovanen, UH
- Internet and Computing Forum P, Antti Ylä-Jääski, Aalto
- Introduction to Artificial Intelligence, Teemu Roos, UH
- Introduction to Computational Creativity, Hannu Toivonen, UH
- Introduction to Machine Learning, Yuan Zou, UH
- Introduction to Probability, Jukka Kohonen, UH
- Johdatus tietoliikenteeseen, Antti Ylä-Jääski, Aalto

- Johdatus tietoliikenteeseen ja multimediatekniikkaan, Antti Ylä-Jääski, Aalto
- Johdatus todennäköisyyslaskentaan, Jukka Kohonen, UH
- Kandiseminaari, Tomi Janhunen, Juho Rousu, Aalto
- Linux Fundamentals, Samu Varjonen, UH
- Logiikka tietotekniikassa: perusteet, Jussi Rintanen, Aalto
- Machine Learning: Advanced Probabilistic Methods, Jaakko Hollmen, Aalto
- Machine Learning: Basic Principles, Jaakko Peltonen, Ritabrata Dutta, Aalto
- Markovian modelling and Bayesian learning, Jukka Corander, UH
- Methods for Software Engineering, Tony Kovanen, UH
- Mobile Middleware, Sasu Tarkoma, UH
- MSc Thesis Seminar on Bioinformatics, Leena Salmela, UH
- Nodes Research Methodologies, Sasu Tarkoma, UH
- Overlay and P2P Networks, Sasu Tarkoma, UH
- Parallel and Distributed Systems, Antti Siirtola, Aalto
- PhD Student Seminar, Jussi Kangasharju, UH
- PhD Student Seminar, Sasu Tarkoma, UH
- Postgraduate course in TCS, Keijo Heljanko, Aalto
- Principles of Algorithmic Techniques, Pekka Orponen, Aalto
- Probabilistic Models, Petri Myllymäki, UH
- Programming Challenges I, Antti Laaksonen, UH
- Programming Challenges II, Antti Laaksonen, UH
- Programming in C, Tony Kovanen, UH
- Project in Biological Sequence Analysis, Veli Mäkinen, UH
- Project in Probabilistic Models, Antti Honkela, UH
- Projects in Unsupervised Machine Learning, Jukka-Pekka Kauppi, Michael Gutmann, UH
- Reactive Systems, Keijo Heljanko, Aalto
- Research Seminar on Data Communications Software, Antti Ylä-Jääski, Aalto
- Scientific Writing, Juho Hirvonen, Janne Korhonen, Jussi Määttä, Teppo Niinimäki, UH
- Scientific Writing for MSc in Computer Science, Esther Galbrun, Emanuele Giaquinta, Sourav Bhattacharya, Kai Zhao, UH
- Seminar on Advanced Data Structures, Simon Puglisi, Travis Gagie, UH
- Seminar: Advanced Topics in Human-Computer Interaction, Giulio Jacucci, UH
- Seminar: Augmented Reality, Elisa Schaeffer, UH
- Seminar: Cognitive Networking and Cross-layer Interaction, Suzan Bayhan, UH
- Seminar: Conducting User Studies in HCI Research, Ilkka Kosunen, UH
- Seminar: Constraint Solving Meets Machine Learning and Data Mining, Matti Järvisalo, UH
- Seminar: Heuristic Search, Brandon Malone, UH
- Seminar: High-throughput Sequencing Data Analysis, Leena Salmela, UH
- Seminar: How to Write a Scientific Review in Human Computer Interaction, Kumaripaba Athukorala, UH
- Seminar: Opportunistic Networks, Jussi Kangasharju, UH

- Software Engineering Lab,
Simo Linkola, UH
- Special Course in Bioinformatics II,
Juho Rousu, Aalto
- Special Course in CIS II,
Juho Rousu, Aristides Gionis, Aalto
- Special Course in CIS IV,
Kerstin Bunte, Manuel Eugster, Aalto
- String Processing Algorithms,
Dominik Kempa, UH
- Student Project in Theoretical Computer Science,
Tommi Junttila, Aalto
- Theory of Computation: Study Group,
Antti Laaksonen, UH
- Tieto- ja viestintäteknologian ja sosiaalisen
vuorovaikutuksen tutkimuksen metodologiaa,
Niklas Ravaja, UH
- Tieto- ja viestintäteknologian sosiaalipsykologiaa,
Niklas Ravaja, UH
- Tietojenkäsittelyteorian perusteet T,
Tommi Junttila, Aalto
- Tietojenkäsittelyteorian perusteet Y,
Tommi Junttila, Aalto
- Todennäköisyyslaskenta,
Jukka Kohonen, UH
- Unsupervised Machine Learning,
Aapo Hyvärinen, UH
- Writing Ethical Issues with Academic Writing in
MSc Studies,
Pirjo Moen, UH

A.2. Research visits of at least 1 month

Visits to HIIT:

- Anagnostopoulos, Aristidis, Assistant Professor
La Sapienza University of Rome, Italy, 2 months
- Barron, Andrew, Professor
University of Yale, 1 month
- Brusilowsky, Peter, Professor
University of Pittsburgh, Pittsburgh, USA, 3 months
- Chen, Changyou, Doctoral Student
NICTA, Australia, 1 month
- Eggeling, Ralf, Doctoral Student
Martin-Luther-Universität, Halle-Wittenberg, Germany, 5 months
- Ferrada, Hector, PhD Student
University of Chile, 4 months
- Helal, Sumi, Professor
University of Florida, 2 months
- Lavrac, Nada, Professor
Jozef Stefan Institute, Slovenia, 2 months
- Nawrot, Ilona, Doctoral Student
Poznań University of Economics, Poland, 3 months
- Van Rens, Karen, Erasmus trainee
HAN University of Applied Sciences, Netherlands, 5 months
- Schaeffer, Satu Elisa, Associate Professor
Universidad Autónoma de Nuevo León, 3 months
- Yong, Cui, PhD
Tsinghua University, China, 2 months

Visits from HIIT:

- Athukorala, Kumaripaba
MPI and DFKI, Germany, 3 months
- Ding, Yi
University of Cambridge, UK, 6 months
- Gurtov, Andrei
ICSI Berkeley, USA, 6 months
- Honkela, Antti
University of Manchester, UK, 1 month
Hyvärinen, Aapo
Advanced Telecommunications Research International, Kyoto, Japan, 10 months

- Kaski, Samuel
University College London, UK, 3 months
- Kangasharju, Jussi
Seoul National University, Seoul, South Korea, 5 months
- Kangasharju, Jussi
ICSI Berkeley, USA, 5 months
- Kempa, Domnik
Karlsruhe Institute of Technology, Germany, 1 month
- Kuikkaniemi, Kai
University of Florida, USA, 1 month
- Kuptsov, Dmitriy
ICSI Berkeley, USA, 3 months
- Lagutin, Dmitrij
Beijing, China, 2,5 months
- Lagutin, Dmitrij
Nanjing, China, 2,5 months
- Lehmuskallio, Asko
School of Information, UC Berkeley, USA, 9 months
- Nelimarkka, Matti
School of Information, UC Berkeley, USA, 5 months
- Lampinen, Airi
School of Information, UC Berkeley, USA, 4,5 months
- Lukyanenko, Andrei
ICSI Berkeley, USA, 5 months
- Marttinen, Pekka
Harvard School of Public Health, USA, 5 months
- Nikolaevskiy, Ilya
ICSI Berkeley, USA, 4 months
- Palomäki, Kalle
ICSI Berkeley, USA, 5 months
- Roos, Teemu
Finnish Institute in Rome, Italy, 2 months
- Schumacher, Andre
ICSI Berkeley, USA, 6,5 months
- Smura, Timo
ICSI Berkeley, 12 months
- Yu, Xiao
University of Pittsburgh, USA, 5 months
- Zhonghong, Ou
Intel Labs, Portland, Oregon, USA, 6 months

B. Funding

We first list the funding sources and the distribution of expenses of each site separately. One should note that comparison between different years or between universities is not always straightforward due to different procedures of accounting.

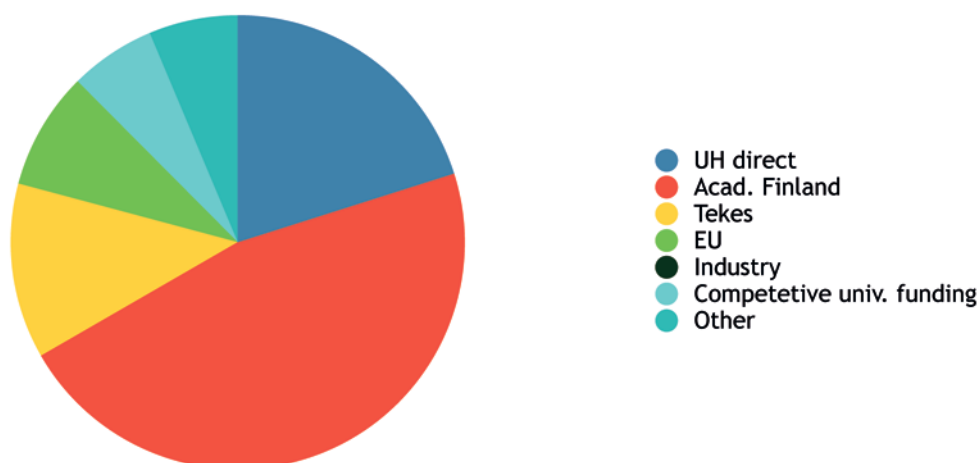
Kumpula's funding figures are shown in Table 1. Direct funding from University of Helsinki (UH) has traditionally been ca 1 MEur, of which a portion has directly been transferred to Aalto University to account for common administrative duties.

From 2013 onwards the "Other" funding will be split to competitive internal funding given by the mother universities, and to other non-university funding such as foundations etc.

Kumpula	2010	2011	2012	2013	%
Total funding	3 110 733	2 649 318	3 792 231	3 879 859	
UH direct funding	810 000	810 000	810 000	780 000	20 %
Academy of Finland	1 156 164	1 301 907	1 694 815	1 806 589	47 %
National Technology Agency Tekes	519 348	304 225	342 377	484 742	12 %
European Union	59 832	65 272	528 457	325 067	8 %
Industry	0	0	45 770	0	0 %
Competitive univ. funding				237 397	6 %
Other (Foundations, 2010-2012 competitive univ. f.)	565 390	167 914	370 812	246 064	6 %
Total expenses	2 915 601	2 410 656	3 720 441	3 738 007	
Salaries	2 091 923	1 515 436	2 535 348	2 602 229	70 %
Other operational expenses	542 065	608 760	448 765	540 849	14 %
Service charge to UH (rents included)	281 614	286 460	736 328	594 928	16 %

Table 1: Kumpula funding 2010–2013.

Figure 1: Kumpula funding 2013.



Otaniemi OIH's funding figures are shown in Table 2. We list separately the funding of two doctoral programmes of the Academy of Finland which HIIT coordinates: they do not fully contribute to HIIT's person-years or publications as most doctoral students are employed by other universities, but they constitute a largish part of HIIT's budget in 2010-2012. Similarly in the list of Expenses, the large amount of "Other operational expenses" mainly consists of the expenses of these doctoral programmes in 2010-2012. From 2013 onwards, most of their incomes and expenses are handled by universities' central administration, and not by HIIT.

OIH	2010	2011	2012	2013	%
Total funding	6 394 357	6 180 389	5 976 738	4 882 452	
Aalto direct funding	1 000 000	1 000 000	1 000 000	1 000 000	20 %
UH direct funding	168 200	168 200	168 200	168 200	3 %
Academy of Finland	612 452	796 505	1 110 568	996 394	20 %
National Technology Agency Tekes	1 923 352	1 266 363	1 135 342	1 191 938	24 %
Acad.Finland doctoral programmes	1 007 319	1 001 904	1 084 060	133 333	3 %
European Union	848 983	786 099	519 359	722 156	15 %
Industry	190 464	40 173	57 566	25 206	1 %
Competitive univ. funding	0	0	0	233 356	5 %
Other (Foundations, 2010-2012 competitive univ. f.)	643 587	1 121 144	901 642	411 869	8 %

Total expenses	5 981 211	5 869 826	6 159 939	4 718 032	
Salaries	3 434 744	2 756 648	2 999 485	2 978 904	63 %
Other operational expenses	1 793 403	2 415 402	2 310 708	1 079 708	23 %
Rents	474 044	430 582	396 274	265 002	6 %
Service charge to Aalto	279 021	267 194	453 472	394 418	8 %

Table 2: OIH funding 2010–2013.

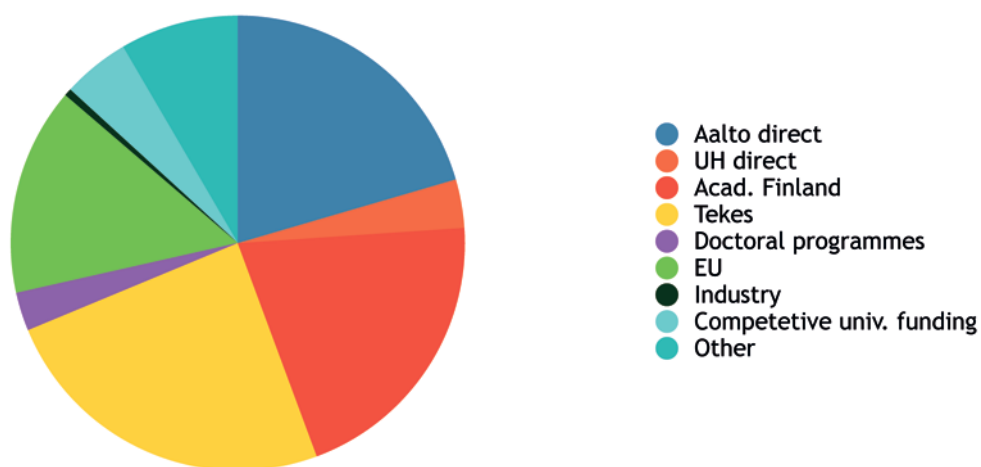


Figure 2: OIH funding 2013.

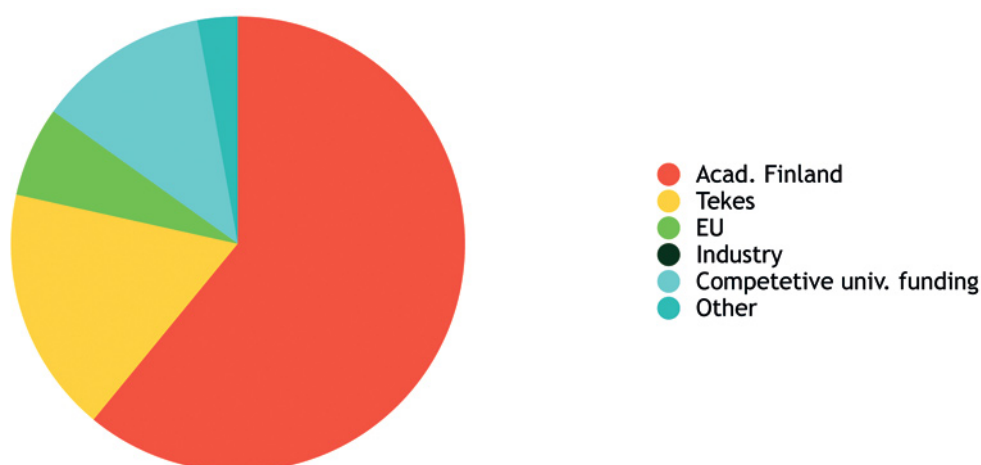
Otaniemi T building's funding figures are shown in Table 3. T building corresponds to HIIT activities at Aalto University's ICS and CSE departments. A few large projects have ended in 2012, making the 2013 figures slightly smaller.

Otaniemi T building	2010	2011	2012	2013	%
Total funding	2 535 715	1 589 901	1 713 521	1 266 407	
Academy of Finland	657 470	849 966	858 812	771 810	61 %
National Technology Agency Tekes	957 160	279 865	320 361	222 088	18 %
European Union	115 198	97 118	72 999	81 071	6 %
Industry	176 397	112 303	85 033	0	0 %
Competitive univ. funding				155 050	12 %
Other (Foundations, 2010-2012 competitive univ. f.)	446 716	46 095	226 316	36 388	3 %

Total expenses	2010	2011	2012	2013	%
Total expenses	2 236 649	1 472 035	1 637 327	1 117 904	
Salaries	1 712 996	1 094 232	1 070 927	865 979	77 %
Other operational expenses	175 607	123 716	328 914	68 514	6 %
Service charge to Aalto (rents included)	348 046	254 087	237 485	183 411	16 %

Table 3: Otaniemi T-building funding 2010–2013.

Figure 3: Otaniemi T-building funding 2013.



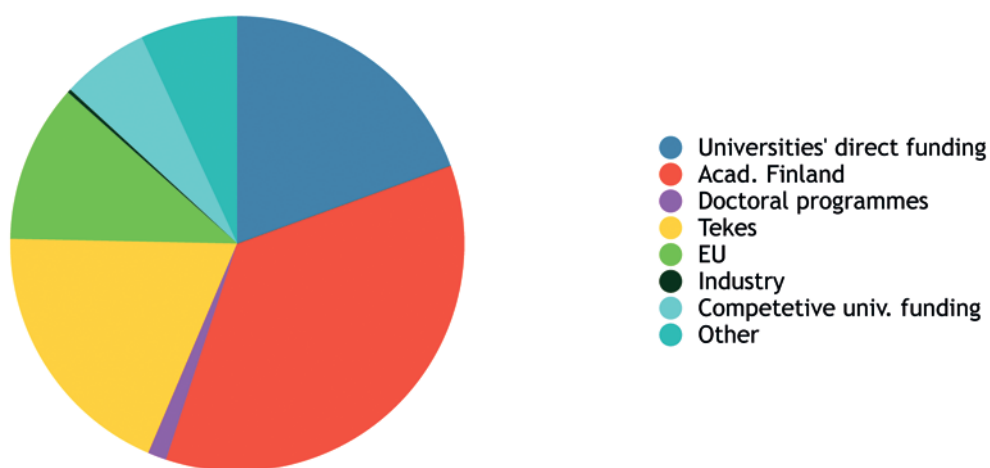
Finally we list the funding sources and the distribution of expenses for the whole HIIT in Table 4.

HIIT	2010	2011	2012	2013	%
Total funding	12 040 805	10 419 608	11 482 489	10 028 717	
Universities' direct funding	1 978 200	1 978 200	1 978 200	1 948 200	19 %
Academy of Finland	2 426 086	2 948 378	3 664 196	3 574 793	36 %
Doctoral programmes	1 007 319	1 001 904	1 084 060	133 333	1 %
National Technology Agency Tekes	3 399 860	1 850 453	1 798 080	1 898 768	19 %
European Union (EU)	1 024 012	948 489	1 120 815	1 128 294	11 %
Industry	366 861	152 476	188 369	25 206	0 %
Competitive univ. funding	0	0	0	625 803	6 %
Other (Foundations, 2010-2012 competitive univ. f.)	1 838 468	1 539 708	1 648 770	694 321	7 %

Total expenses	11 133 463	9 752 517	11 517 707	9 573 942	
Salaries	7 239 663	5 366 316	6 605 761	6 447 112	67 %
Other operational expenses	2 511 075	3 147 878	3 088 387	1 689 071	18 %
Service charge to UH/Aalto	788 648	765 307	1 427 286	1 172 757	12 %
Rents	594 077	473 016	396 274	265 002	3 %

Table 4: HIIT funding 2010–2013.

Figure 4: HIIT funding 2013.



C. Personnel

In 2013 HIIT staff completed 154 person-years on HIIT funding. In addition, many persons affiliated with HIIT are funded by participating departments or personal grants either from the Academy of Finland or Foundations. The diversity of affiliations is characteristic of HIIT personnel: the most common is an affiliation with one or both of the parent universities, but there are also some who share their time between HIIT and some other organisation. Thus the total number of personnel (over 300) is much higher than the number of person-years completed by HIIT funding.

The distribution of person-years per sites is shown in Table 5. The Otaniemi T building site comprises HIIT researchers both at Aalto University's ICS department and CSE department.

Staff (person-years)	2008	2009	2010	2011	2012	2013
Kumpula	57	60	55	40	58	57
Otaniemi OIH	82	83	72	66	50	60
Otaniemi T building	26	42	48	29	36	37
total	165	185	175	135	144	154

Table 5: Number of person-years paid by HIIT 2008-2013

Another way to visualize the personnel is to look at the distribution of personnel groups per person years, again only listing the person years completed by HIIT funding; see Table 6.

Staff (person-years)	Kumpula	Otaniemi OIH	Otaniemi T building	total
senior researchers	6	10	3	19
postdocs	11	14	11	36
doctoral students	17	13	18	48
project researchers	0	4	0	4
research assistants	20	13	5	38
administration	3	6	0	9
total	57	60	37	154

Table 6: Distribution of person-years by personnel groups in 2013.

The number of non-Finnish staff members is large. Almost all non-Finns come from Europe, China, India and India's neighbouring countries. The pie chart includes all non-Finnish personnel, also those not counted into HIIT's person-years.

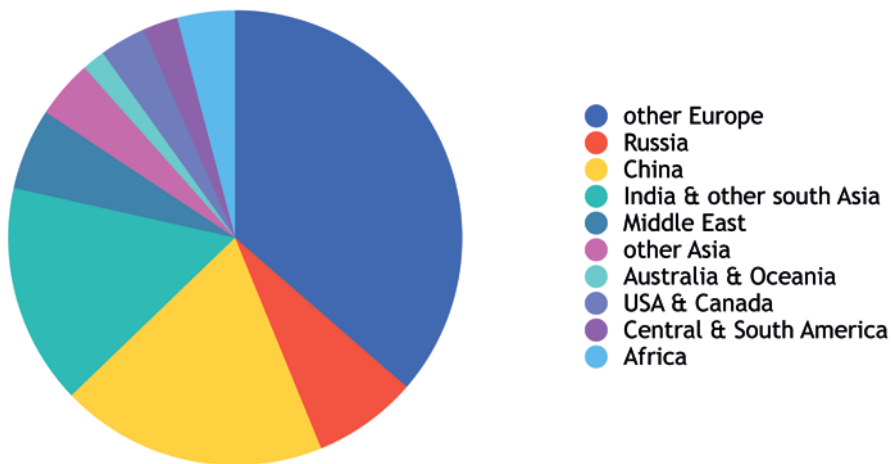


Figure 5: Nationalities of non-Finnish staff members 2013

List of Personnel

Adhikari Prem Raj	Doctoral candidate	T building
Ahmed Imtiaj	Research Assistant	Kumpula
Ahonen Teppo	Doctoral candidate	Kumpula
Ain Mark Joseph	Project Researcher	OIH
Ajanki Antti Olavi	Doctoral candidate	T building
Alanko Jarno	Research Assistant	Kumpula
Althermeler Nicole	Research Assistant	T building
Ammad-Ud-Din Muhammad	Doctoral candidate	T building
An Chao	Research Assistant	OIH, Kumpula
Anagnostopoulos Aristidis	Visiting professor	T building
Athukorala Kumaripaba	Doctoral candidate	Kumpula
Bandyopadhyay Payel	Research Assistant	Kumpula
Barral Mery de Bellegarde Oswald	Research Assistant	OIH, Kumpula
Bayhan Suzan	Postdoctoral Researcher	OIH, Kumpula
Belazzougui Djamel	Postdoctoral Researcher	Kumpula
Berg Otto Jeremias	Research Assistant	Kumpula
Bergström-Lehtovirta Joanna	Doctoral candidate	OIH
Bhattacharya Sourav	Doctoral candidate	Kumpula
Bingham Ella	Research Coordinator	OIH, Kumpula
Bomanson Jori	Research Assistant	T building
Brügge Kai	Doctoral candidate	Kumpula

Bunte Kerstin	Postdoctoral Researcher	T building
Buntine Wray	HIIT Fellow	Kumpula
Buschek Daniel	Research Assistant	OIH
Cech Luca	Research Assistant	Kumpula
Cichonska Anna	Doctoral candidate	Kumpula
Corander Jukka	Professor	Kumpula
Crespo Ribeiro Cabral Diogo	Postdoctoral Researcher	Kumpula
Cunial Fabio	Postdoctoral Researcher	Kumpula
Czeizler Elena	Senior Research Scientist	T building
Deng Yang	Doctoral candidate	T building
Devadiga Ketan Uttam	Research assistant	T building
Ding Yi	Doctoral candidate	Kumpula
Dong Shichao	Research assistant	T building
Du Mian	Doctoral candidate	Kumpula
Dubey Paromita	Research Assistant	T building
Dutta Ritabrata	Postdoctoral Researcher	OIH
Dykstra Karmen Lata	Research Assistant	T building
Eklund Elina	Research Assistant	T building
El-Khoury Youssef	Research Assistant	Kumpula
Entner Doris	Doctoral candidate	Kumpula
Eugster Manuel	Postdoctoral Researcher	OIH
Eyherabide Hugo	Postdoctoral Researcher	Kumpula
Floréen Patrik	Vice Director of HIIT	Kumpula, OIH
Gagie Travis	Postdoctoral Researcher	Kumpula, OIH
Galbrun Esther	Doctoral candidate	Kumpula
Gebser Martin	Postdoctoral Researcher	T building
Georgii Gisela Elisabeth	Postdoctoral Researcher	OIH
Ghani Adnan	Doctoral candidate	T building
Giaquinta Emanuele	Postdoctoral Researcher	Kumpula
Gillberg Jussi	Doctoral candidate	T building
Gionis Aristides	Professor, Programme Director	T building
Głowacka Dorota	Postdoctoral Researcher	Kumpula
Gross Oskar	Doctoral candidate	Kumpula
Guo Haipeng	Research Assistant	Kumpula
Gurtov Andrei	Senior Research Scientist	OIH
Gutmann Urs Michael	Postdoctoral Researcher	Kumpula
Gönen Mehmet	Postdoctoral Researcher	T building
Haapoja Jesse	Research Assistant	OIH
Hankala Teemu	Research Assistant	Kumpula
Hartke Klaus	Doctoral candidate	T building
Hazara Murtaza	Research Assistant	T building
He Liye	Research Assistant	Kumpula
Helal Abdelsalam	Visiting professor	OIH
Heljanko Keijo	Professor, Programme Director	T building

Hemminki Jaakko	Research Assistant	Kumpula
Hinkka Atte Einari	Research Assistant	OIH
Hirvonen Juho	Doctoral candidate	Kumpula
Hoggan Eve	Postdoctoral Researcher	Kumpula
Hollmen Jaakko	Senior Research Scientist	T building
Holmqvist Iris	Project Secretary	OIH
Hong Liu	Visiting Researcher	T building
Honkela Antti	Senior Research Scientist	Kumpula
Hopearuoho Erno	Research Assistant	OIH
Hoque Mohammad	Doctoral candidate	T building, Kumpula
Hore Sayantan	Research Assistant	Kumpula
Hou Jian	Research Assistant	T building
Hoyer Patrik	Senior Research Scientist	Kumpula
Hsieh Yi-Ta	Research Assistant	Kumpula
Hwang Zhen-Huan	Research assistant	T building
Hyttinen Antti	Doctoral candidate	Kumpula
Hyvärinen Aapo	Professor	Kumpula
Ikkala Tapio	Research Assistant	OIH
Jaakkola Tommi	HIIT Fellow	Kumpula
Jacucci Giulio	Professor, Programme Director	Kumpula
Jaiswal Apurva	Research Assistant	OIH
Janhunen Tomi	Lecturer	T building
Johnson Mikael	Postdoctoral Researcher	OIH
Junttila Tommi	Lecturer	T building
Jylhä Antti	Postdoctoral Researcher	Kumpula
Järvi Juha	Project Researcher	OIH
Järvisalo Matti	Postdoctoral Researcher	Kumpula
Jääskinen Väinö	Doctoral candidate	Kumpula
Kaipainen Pertti	Research Assistant	Kumpula
Kallio Mikko Aleksi	Doctoral candidate	T building
Kangas Juho-Kustaa	Doctoral candidate	Kumpula
Kangasharju Jussi	Professor	Kumpula
Kankainen Anu	Senior Research Scientist	OIH
Kantosalo Anna	Research Assistant	Kumpula
Karila Arto	Senior Research Scientist	OIH
Karkulahti Ossi	Doctoral candidate	Kumpula
Karvonen Kristiina	Senior Research Scientist	OIH
Kaski Petteri	Professor	T building
Kaski Samuel	Professor, Director of HIIT	OIH, Kumpula
Kauppi Jukka-Pekka	Postdoctoral Researcher	Kumpula
Kauttio Janne	Research Assistant	T building
Kempa Dominik	Doctoral candidate	Kumpula
Kemppinen Jukka	Senior Research Scientist	OIH
Khan Suleiman Ali	Doctoral candidate	T building

Kindermann Roland	Doctoral candidate	T building
Klami Arto	Senior Research Scientist	Kumpula
Kludas Jana	Postdoctoral Researcher	T building
Kohonen Jukka	Doctoral candidate	Kumpula
Koivisto Mikko	Professor	Kumpula
Kokkala Jussi	Research Assistant	Kumpula
Komu Miika	Postdoctoral Researcher	Kumpula
Kontkanen Petri	Research Coordinator	Kumpula
Konyushkova Ksenia	Research Assistant	Kumpula
Korhonen Janne	Doctoral candidate	Kumpula
Korpela Mikko	Doctoral candidate	T building, Kumpula
Korzun Dmitry	Senior Research Scientist	OIH
Koskela Joakim	Doctoral candidate	OIH
Kosunen Ilkka	Doctoral candidate	OIH
Kovanen Tony	Research Assistant	Kumpula
Kuikkaniemi Kai	Doctoral candidate	OIH
Kujala Inka	Planning Secretary	Kumpula
Kuosmanen Anna	Research Assistant	Kumpula
Kuptsov Dmitriy	Doctoral candidate	OIH
Kuuppelomäki Päivi	Planning Officer	Kumpula
Kärkkäinen Juha	Senior Research Scientist	Kumpula
Laaksonen Antti	Doctoral candidate	Kumpula
Lagerspetz Emil	Doctoral candidate	Kumpula
Lagutin Dmitrij	Postdoctoral Researcher	OIH
Lampinen Airi	Doctoral candidate	OIH
Langohr Laura	Doctoral candidate	Kumpula
Laurinharju Juhana	Research Assistant	Kumpula
Lavrac Nada	Visiting professor	T building
Lazarus Garcia Christopher	Research Assistant	T building
Lehdonvirta Vili	Postdoctoral Researcher	OIH
Lehmuskallio Asko	Postdoctoral Researcher	OIH
Lehtinen Vilma	Doctoral candidate	OIH
Lehtiö Anu	Research Assistant	Kumpula
Lehtonen Marko	Doctoral candidate	OIH
Leino Jukka	Research Assistant	Kumpula
Leisti-Szymczak Anni	Research Assistant	OIH
Lempiäinen Tuomo	Research Assistant	Kumpula
Leppäaho Eemeli	Doctoral candidate	T building
Lievonen Petri	Research Assistant	OIH
Liikkanen Lassi	Postdoctoral Researcher	OIH
Lijffijt Jeffrey	Doctoral candidate	T building
Lin Ziyuan	Doctoral candidate	T building
Linkola Simo	Research Assistant	Kumpula
Lintusaari Jarno	Research Assistant	Kumpula

Liu Guohua	Postdoctoral Researcher	T building
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Looga Vilen	Doctoral candidate	T building
Luukkala Vesa-Veikko	Doctoral candidate	T building
Malmi Eric	Doctoral candidate	T building
Malone Brandon	Postdoctoral Researcher	Kumpula
Markus Konrad	Project Researcher	OIH
Martino Luca	Postdoctoral Researcher	Kumpula
Marttinen Pekka	Postdoctoral Researcher	T building
Mathioudakis Michail	Postdoctoral Researcher	OIH
Miettunen Pirkko	Department Secretary	OIH
Modig Arttu	Research Assistant	Kumpula
Moen Pirjo	Research Coordinator	Kumpula
Mononen Tommi	Postdoctoral Researcher	T building
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Myllymaa Kalle	Research Assistant	Kumpula
Myllymäki Petri	Professor, Programme Director	Kumpula
Mäkinen Veli	Professor	Kumpula
Määttä Jussi	Doctoral candidate	Kumpula
Nechaev Boris	Doctoral candidate	OIH
Nelimarkka Matti	Project Researcher	OIH
Nguyen Quan	Research Assistant	Kumpula
Niemelä Ilkka	Professor	T building
Niemenmaa Matti	Research Assistant	T building
Niemimäki Sami	IT Specialist	OIH
Niinimäki Teppo	Doctoral candidate	Kumpula
Nikkilä Mikko	Research Assistant	Kumpula
Nikolaevskiy Ilya	Research Assistant	OIH
Nouri Javad	Research Assistant	Kumpula
Nuorento Markus	IT Specialist	Kumpula
Nurmi Petteri	Senior Research Scientist	Kumpula, OIH
Nurminen Antti	Postdoctoral Researcher	OIH
Nybo Kristian	Doctoral candidate	T building
Oikarinen Emilia	Postdoctoral Researcher	T building
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Parkkinen Ville	Doctoral candidate	Kumpula
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Paul Debdas	Research Assistant	T building
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Perez Lopez Javier	Research assistant	T building
Pervilä Mikko	Postdoctoral Researcher	Kumpula
Pessia Alberto	Doctoral candidate	Kumpula
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Pivovarova Lidia	Doctoral candidate	Kumpula
Polishchuk Tatiana	Doctoral candidate	OIH
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Quazi Rumana	Doctoral candidate	Kumpula
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Rajaraman Swaminathan Vasanth	Research assistant	T building
Rannanjärvi Martti	Research Assistant	Kumpula
Rao Weixiong	Postdoctoral Researcher	Kumpula
Rasku Lari	Research Assistant	Kumpula
Ravaja Jaakko Niklas	Professor	OIH
Regan John	Postdoctoral Researcher	OIH
Reijonen Aki	Research Assistant	OIH
Reinikainen Johanna	Research Assistant	OIH
Reitmaa Jukka	Research Assistant	OIH
Remes Sami	Research Assistant	T building
Riekkinen Markku	Research Assistant	T building
Rinta-Koski Olli-Pekka	Doctoral candidate	T building
Rintanen Jussi	Postdoctoral Researcher	T building
Rissanen Jorma	Professor, HIIT Fellow	Kumpula
Roos Teemu	Professor	Kumpula
Rousu Juho	Professor	T building
Rozenshtein Polina	Research Assistant	T building
Ruotsalo Tuukka	Postdoctoral Researcher	OIH
Ruottu Toni	Research Assistant	Kumpula
Ruusunen Matti	Project Researcher	OIH
Rybicki Joel	Doctoral candidate	Kumpula
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Salmela Leena	Postdoctoral Researcher	Kumpula
Sandholm Max	Research Assistant	OIH
Sandström Tuukka	Research Assistant	OIH
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Schumacher Andre	Postdoctoral Researcher	T building

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Seth Sohan	Postdoctoral Researcher	OIH
Shen Huibin	Doctoral candidate	T building
Shubin Mikhail	Doctoral candidate	Kumpula
Siekkinen Matti	University Teacher	T building
Silfverberg Suvi	Doctoral candidate	OIH
Siren Jukka	Postdoctoral Researcher	Kumpula
Siren Miika	Research Assistant	Kumpula
Smura Timo	Postdoctoral Researcher	OIH
Sobih Ahmed	Research Assistant	Kumpula
Solin Otto	Doctoral candidate	Kumpula
Sovijärvi-Spape Zania	Research Assistant	Kumpula
Sovijärvi-Spape Michiel	Postdoctoral Researcher	OIH
Sri Kalyanaraman Ramya	Doctoral candidate	OIH
Su Hongyu	Doctoral candidate	T building
Summanen Iris	Research Assistant	OIH
Suomela Jukka	Postdoctoral Researcher	Kumpula
Suominen De Rios Noora	Secretary	OIH
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Talvitie Topi	Research Assistant	Kumpula
Tamene Fitsum	Research Assistant	T building
Tarkoma Sasu	Professor	Kumpula
Tasoulis Sotirios	Postdoctoral Researcher	Kumpula
Tatti Nikolaj	Postdoctoral Researcher	T building
Toiskallio Kalle	Senior Research Scientist	OIH
Toivanen Jukka	Doctoral candidate	Kumpula
Toivola Janne	Doctoral candidate	T building
Toivonen Hannu	Professor	Kumpula
Toivonen Jarkko	Doctoral candidate	Kumpula
Tolvanen Juha	Project Researcher	OIH
Tomescu Alexandru	Postdoctoral Researcher	Kumpula
Tonteri Pekka	IT Manager	OIH
Topa Hande	Doctoral candidate	T building
Torvinen Juha	Project Researcher	OIH
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Uuksulainen Heikki	Research Assistant	Kumpula
Uurtio Viivi	Research Assistant	T building
Vaittinen Petri	Research Assistant	Kumpula
Valenzuela Serra	Doctoral candidate	Kumpula
Valitutti Alessandro	Postdoctoral Researcher	Kumpula
Varjonen Samu	Postdoctoral Researcher	Kumpula
Vasilev Nikolay	Research Assistant	Kumpula
Vehkala Minna	Doctoral candidate	Kumpula
Vepsäläinen Jouni	Research Assistant	OIH
Vihavainen Sami	Doctoral candidate	OIH
Viiri Kalle	Research Assistant	Kumpula
Vilkki Max Antero	Research Assistant	OIH
Virtanen Seppo	Doctoral candidate	T building
Virtanen Perttu	Postdoctoral Researcher	OIH
Visala Kari	Doctoral candidate	OIH
von Kugelgen Maria	Research Assistant	Kumpula
Väre Lauri	Research Assistant	Kumpula
Wagner Paul	Doctoral candidate	T building
Wang Liang	Doctoral candidate	Kumpula
Wei Lu	Postdoctoral Researcher	Kumpula
Westrup Clemens	Research Assistant	T building
Xiao Yu	Postdoctoral Researcher	T building
Xiong Jie	Doctoral candidate	Kumpula
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Zliobaite Indre	Postdoctoral Researcher	T building
Zou Yuan	Doctoral candidate	Kumpula

D. Publications

Publications 2007 - 2013	2007	2008	2009	2010	2011	2012	2013
Articles in international scientific journals with referee practice	50	67	51	69	79	81	101
Articles in international edited works and conference proceedings with referee practice	94	126	126	153	134	128	137
Scientific monographs and edited books	6	3	6	8	9	8	5
Other publications	19	40	25	25	29	31	16
Computer programs and algorithms	1	0	1	10	8	3	2
Doctoral theses	9	14	13	10	7	10	18
Licenciate theses	0	1	1	0	0	0	1
Master's theses	8	76	27	33	53	55	53
Total	187	327	250	308	319	316	333

D.1. Articles in international scientific journals with referee practice

1. Lauri Ahlroth, Olli Puttonen, and André Schumacher. Approximately uniform online checkpointing with bounded memory. *Algorithmica*, 67(2):234–246, 2013.
2. Lauri Ahlroth, André Schumacher, and Pekka Orponen. Online bin packing with delay and holding costs. *Operations Research Letters*, 41(1):1–6, 2013.
3. Gernot Akemann, Mario Kieburg, and Lu Wei. Singular value correlation functions for products of wishart random matrices. *Journal of Physics A: Mathematical and Theoretical*, 46(27), 2013.
4. Sasitharan Balasubramaniam and Jussi Kangasharju. Realizing the internet of nano things: Challenges, solutions, and applications. *Computer : a publication of the IEEE Computer Society*, 46(2):62–68, 2013.
5. Suzan Bayhan and Fatih Alagöz. Scheduling in centralized cognitive radio networks for energy efficiency. *IEEE Transactions on Vehicular Technology*, 62(2):582–595, 2013.
6. Suzan Bayhan, Salim Eryigit, Fatih Alagöz, and Tuna Tugcu. Low complexity uplink schedulers for energy-efficient cognitive radio networks. *IEEE Wireless Communications Letters*, 2(3):363–366, 2013.
7. Andreas Björklund and Petteri Kaski. Counting closed trails. *Information Processing Letters*, 113(1-2):1–3, 2013.
8. Paul Blomstedt and Jukka Corander. Posterior predictive comparisons for the two-sample problem. *Communications in Statistics - Theory and Methods*, 2013.
9. Francesco Bonchi, Gianmarco De Francisci Morales, Aristides Gionis, and Antti Ukkonen. Activity preserving graph simplification. *Data Mining and Knowledge Discovery*, 27(3):321–343, 2013.
10. Francesco Bonchi, Aristides Gionis, and Antti Ukkonen. Overlapping correlation clustering. *Knowledge and Information Systems*, 35(1):1–32, 2013.
11. Yevgen Borodin, Valentin Polishchuk, Jalal Mahmud, I. V. Ramakrishnan, and Amanda Stent. Live and learn from mistakes: A lightweight system for document classification. *Information Processing & Management*, 49(1):83–98, 2013.

12. Kai Brugge, Asja Fischer, and Christian Igel. The flip-the-state transition operator for restricted Boltzmann machines. *Machine Learning*, 93(1):53–69, 2013.
13. Andrew G. Bunn, Esther Jansma, Mikko Korpela, Robert D. Westfall, and James Baldwin. Using simulations and data to evaluate mean sensitivity (\$\$) as a useful statistic in dendrochronology. *Dendrochronologia*, 31(3):250–254, 2013.
14. Cristina Campi, Lauri Parkkonen, Riitta Hari, and Aapo Hyvärinen. Non-linear canonical correlation for joint analysis of MEG signals from two subjects. *Frontiers in Neuroscience*, 7(107), 2013.
15. Huayang Cao, Peidong Zhu, Xicheng Lu, and Andrei Gurtov. A layered encryption mechanism for networked critical infrastructures. *IEEE Network*, 27(1):12–18, January 2013.
16. Lu Cheng, Thomas R. Connor, Jukka Siren, David M. Aanensen, and Jukka Corander. Hierarchical and spatially explicit clustering of DNA sequences with BAPS software. *Molecular Biology and Evolution*, 30(5):1224–1228, 2013.
17. Jukka Corander, Kerttu K. Majander, Lu Cheng, and Juha Merilä. High degree of cryptic population differentiation in the Baltic Sea herring *Clupea harengus*. *Molecular Ecology*, 22(11):2931–2940, 2013.
18. Jukka Corander, Jie Xiong, Yaqiong Cui, and Timo Koski. Optimal Viterbi Bayesian predictive classification for data from finite alphabets. *Journal of Statistical Planning and Inference*, 143(2):261–275, 2013.
19. Nicola Corradi, Konstantinos Priftis, Giulio Jacucci, and Luciano Gamberini. Oops, I forgot the light on! The cognitive mechanisms supporting the execution of energy saving behaviors. *Journal of Economic Psychology*, 34:88–96, 2013.
20. Benjamin Cowley, Tuija Heikura, and Niklas Ravaja. Cardiovascular physiology predicts learning effects in a serious game activity. *Computers & Education*, 60(1):299–309, 2013.
21. Benjamin Cowley, Tuija Heikura, and Niklas Ravaja. Learning loops: Interactions between guided reflection and experience-based learning in a serious game activity. *Journal of Computer Assisted Learning*, 29(4):348–370, 2013.
22. Benjamin Cowley, Ilkka Kosunen, Petri Lankoski, Matias J. Kivikangas, Simo Järvelä, Inger Ekman, Jaakko Kempainen, and Niklas Ravaja. Experience assessment and design in the analysis of gameplay. *Simulation & Gaming*, (1):1–29, 2013.
23. Yong Cui, Hongyi Wang, Xiuzhen Cheng, Dan Li, and Antti Ylä-Jääski. Dynamic scheduling for wireless data center networks. *IEEE Transactions on Parallel and Distributed Systems*, 2013.
24. Eugen Czeizler and Alexandru Popa. Synthesizing minimal tile sets for complex patterns in the framework of patterned DNA self-assembly. *Theoretical Computer Science*, (499):23–37, 2013.
25. Mark de Been, Willem van Schaik, Lu Cheng, Jukka Corander, and Rob J. Willems. Recent recombination events in the core genome are associated with adaptive evolution in *enterococcus faecium*. *Genome Biology and Evolution*, 2013.
26. Salim Eryigit, Suzan Bayhan, and Tuna Tugcu. Energy-efficient multi-channel cooperative sensing energy-efficient multi-channel cooperative sensing scheduling with heterogeneous channel conditions for cognitive radio networks. *IEEE Transactions on Vehicular Technology*, 62(6):2699, 2013.
27. Hugo Gabriel Eyherabide and Inà Samengo. When and why noise correlations are important in neural decoding. *Journal of Neuroscience*, 33(45):17921–17936, 2013.
28. Szilard Zsolt Fazekas, Hiro Ito, Yasushi Okuno, Shinnosuke Seki, and Kei Taneishi. On computational complexity of graph inference from counting. *Natural Computing*, 12(4):589–603, 2013.
29. Fedor V. Fomin and Petteri Kaski. Exact exponential algorithms: Surprises in the face of intractability. *Communications of the ACM*, 56(3):80–88, 2013.

30. Oscar Garcia-Morchon, Dmitriy Kuptsov, Andrei Gurtov, and Klaus Wehrle. Cooperative security in distributed networks. *Computer Communications*, 36(12):1284–1297, July 2013.
31. Emanuele Giaquinta, Szymon Grabowski, and Esko Ukkonen. Fast matching of transcription factor motifs using generalized position weight matrix models. *Journal of Computational Biology*, 20(9):621–630, 2013.
32. Aristides Gionis, Flavio Junqueira, Vincent Leroy, Marco Serafini, and Ingmar Weber. Piggybacking on social networks. *Proceedings of the VLDB Endowment (PVLDB)*, 6(6):409–420, 2013.
33. Fabrizio Grandoni, Anupam Gupta, Stefano Leonardi, Pauli Miettinen, Piotr Sankowski, and Mohit Singh. Set covering with our eyes closed. *SIAM Journal on Computing*, 42(3):808–830, 2013.
34. Michael U. Gutmann and Aapo Hyvärinen. A three-layer model of natural image statistics. *Journal of Physiology (Paris)*, 107(5):369–398, 2013.
35. Mehmet Gönen. Bayesian supervised dimensionality reduction. *IEEE Transactions on Cybernetics*, 43(6):2179–2189, 2013.
36. Mehmet Gönen. Supervised multiple kernel embedding for learning predictive subspaces. *IEEE Transactions on Knowledge and Data Engineering*, 25(10):2381–2389, 2013.
37. Mika Göös, Juho Hirvonen, and Jukka Suomela. Lower bounds for local approximation. *Journal of the ACM*, 60(5), 2013.
38. Ilkka Hanski, Gustavo A. Zurita, M. Isabel Bellocq, and Joel Rybicki. Species-fragmented area relationship. *Proceedings of the National Academy of Sciences of the United States of America*, 110(31):12715–12720, 2013.
39. Eva Heiskanen, Mikael Johnson, and Edina Vadovics. Learning about and involving users in energy saving on the local level. *Journal of Cleaner Production*, 48(June):249, 2013.
40. Uta Hinrichs, Sheelagh Cappendale, Nina Valkanova, Kai Kuikkaniemi, Giulio Jacucci, and Andrew Vande Moere. Guest editor's introduction: Interactive public displays. *IEEE Computer Graphics and Applications*, 33(2):25–27, 2013.
41. Juhani Huovelin, Oskar Gross, Otto Solin, Krister Linden, Sami Petri Tapio Maisala, Tero Oittinen, Hannu Toivonen, Jyrki Niemi, and Miikka Silfverberg. Software newsroom – an approach to automation of news search and editing. *Journal of Print Media Technology Research*, 2(3):141–156, 2013.
42. Heikki Huttunen, Tapio Manninen, Jukka-Pekka Kauppi, and Jussi Tohka. Mind reading with regularized multinomial logistic regression. *Machine Vision and Applications*, 24(6):1311–1325, 2013.
43. Antti Hyttinen, Patrik Hoyer, and Frederick Eberhardt. Experiment selection for causal discovery. *Journal of Machine Learning Research*, 2013(14):3041–3071, 2013.
44. Aapo Hyvärinen. Independent component analysis: recent advances. *Philosophical Transactions - Royal Society. Mathematical, Physical and Engineering Sciences*, 371(1984), 2013.
45. Aapo Hyvärinen and Pavan Ramkumar. Testing independent component patterns by inter-subject or inter-session consistency. *Frontiers in Human Neuroscience*, 7, 2013.
46. Aapo Hyvärinen and Stephen M. Smith. Pairwise likelihood ratios for estimation of non-gaussian structural equation models. *Journal of Machine Learning Research*, 14:111–152, 2013.
47. Arttu Jolma, Jian Yan, Thomas Whittington, Jarkko Toivonen, Kazuhiro R. Nitta, Pasi Rastas, Ekaterina Morgunova, Martin Enge, Mikko Taipale, Gonghong Wei, Kimmo Palin, Juan M. Vaquerizas, Renaud Vincenzelli, Nicholas M. Luscombe, Timothy R. Hughes, Patrick Lemaire, Esko Ukkonen, Teemu Kivioja, and Jussi Taipale. Dna-binding specificities of human transcription factors. *Cell*, 152(1-2):327 – 339, 2013.
48. Simo Järvelä, J. Matias Kivikangas, Jari Kätsyri, and Niklas Ravaja. Physiological linkage of dyadic gaming experience. *Simulation & Gaming*, (1):1–17, 2013.

49. Simo Järvelä, Matias Kivikangas, Timo Saari, and Niklas Ravaja. Media experience as a predictor of future news reading. *Journal of Print and Media Technology Research*, 2(3):131–139, 2013.
50. Jukka-Pekka Kauppi, Lauri Parkkonen, Riitta Hari, and Aapo Hyvärinen. Decoding magnetoencephalographic rhythmic activity using spectrospatial information. *NeuroImage*, 83:921–936, 2013.
51. J. Matias Kivikangas and Niklas Ravaja. Emotional responses to victory and defeat as a function of opponent. *IEEE Transactions on Affective Computing*, 4(2):173–182, 2013.
52. Arto Klami. Bayesian object matching. *Machine Learning*, 92(2-3):225–250, 2013.
53. Arto Klami, Seppo Virtanen, and Samuel Kaski. Bayesian canonical correlation analysis. *Journal of Machine Learning Research*, 14:965–1003, 2013.
54. Dmitry Korzun. Local and global models for large-scale peer-to-peer systems. *Journal on Selected Topics in Nano Electronics and Computing (JSTNEC)*, 1(1):10–23, 2013.
55. Dmitry Korzun and Andrei Gurtov. Hierarchical architectures in structured peer-to-peer overlay networks. *Peer-to-Peer Networking and Applications*, pages 1–37, 2013.
56. Miika Koskinen, Jaakko Viinikanoja, Mikko Kurimo, Arto Klami, Samuel Kaski, and Riitta Hari. Identifying fragments of natural speech from the listener's MEG signals. *Human Brain Mapping*, 34(6):1477–1489, 2013.
57. Pardeep Kumar, Andrei Gurtov, Mika Ylianttila, Sang-Gon Lee, and HoonJae Lee. A strong authentication scheme with user privacy for wireless sensor networks. *ETRI journal*, 35(5):889–899, 2013.
58. Jari Kätsyri, Riitta Hari, Niklas Ravaja, and Lauri Nummenmaa. Just watching the game ain't enough: Striatum fMRI reward responses to successes and failures in a video game during active and vicarious playing. *Frontiers in Human Neuroscience*, 7(7):1–13, 2013.
59. Jari Kätsyri, Riitta Hari, Niklas Ravaja, and Lauri Nummenmaa. The opponent matters: Elevated fmri reward responses to winning against a human versus a computer opponent during interactive video game playing. *Cerebral Cortex*, 23(12):2829–2839, 2013.
60. Salla-Maaria Laaksonen, Mikko Salminen, Alessio Falco, Pekka Aula, and Niklas Ravaja. Use of psychophysiological measurements in communication research: Teachings from two studies of corporate reputation. *ESSACHESS – Journal for Communication Studies*, 6(1):245–255, 2013.
61. Laura Langohr, Vid Podpecan, Marko Petek, Igor Mozetic, Kristina Gruden, Nada Lavarac, and Hannu Toivonen. Contrasting subgroup discovery. *Computer Journal*, 56(3):289–303, 2013.
62. François Lebreton, Willem van Schaik, Abigail Manson McGuire, Paul Godfrey, Allison Griggs, Varun Mazumdar, Jukka Corander, Lu Cheng, Sakina Saif, Sarah Young, Qiandong Zeng, Jennifer Wortman, Bruce Birren, Rob J. L. Willems, Ashlee M. Earl, and Michael S. Gilmore. Emergence of epidemic multidrug-resistant enterococcus faecium from animal and commensal strains. *mBio*, 4(4), 2013.
63. Asko Lehmuskallio. Banning public nudity: Images of bodies as sites of contested moral values. *JOMEC Journal. Journalism, Media and Cultural Studies*, (4):1–20, 2013.
64. Jiuyong Li, Jixue Liu, Hannu Toivonen, and Jianming Yong. Effective pruning for the discovery of conditional functional dependencies. *Computer Journal*, 56(3):378–392, 2013.
65. Ming Li, Andrey Lukyanenko, Sasu Tarkoma, Yong Cui, and Antti Ylä-Jääski. Tolerating Path Heterogeneity in Multipath TCP with Bounded Receive Buffers. *Computer Networks*, 64:1–14, February 2014.
66. Pekka Marttinen, Jussi Gillberg, Aki Havulinna, Jukka Corander, and Samuel Kaski. Genome-wide association studies with high-dimensional phenotypes. *Statistical Applications in Genetics and Molecular Biology*, 12(4):413–431, 2013.

67. Alan McNally, Lu Cheng, Simon R. Harris, and Jukka Corander. The evolutionary path to extraintestinal pathogenic, drug-resistant *Escherichia coli* is marked by drastic reduction in detectable recombination within the core genome. *Genome Biology and Evolution*, 5(4):699–710, 2013.
68. Bjarke Molgaard, Wolfram Birmili, Sam Clifford, Andreas Massling, Kostas Eleftheriadis, Michael Norman, Stergios Vratolis, Birgit Wehner, Jukka Corander, Kaarle Hämeri, and Tareq Hussein. Evaluation of a statistical forecast model for size-fractionated urban particle number concentrations using data from five European cities. *Journal of Aerosol Science*, 66:96–110, 2013.
69. Alessio Moneta, Doris Entner, Patrik O. Hoyer, and Alex Coad. Causal inference by independent component analysis. *Oxford Bulletin of Economics and Statistics*, 75(5):705–730, 2013.
70. Sari Mulla, Markus Jokela, Mirka Hintsanen, Jari Lipsanen, Saija Alatupa, Niklas Ravaja, and Liisa Keltikangas-Järvinen. Associations between teacher-rated versus self-rated student temperament and school achievement. *Scandinavian Journal of Educational Research*, (1):1–26, 2013.
71. Veli Mäkinen and Jani Rahkola. Haploid to diploid alignment for variation calling assessment. *BMC Bioinformatics*, 14((Suppl 15):S13), 2013.
72. Elina Numminen, Lu Cheng, Mats Gyllenberg, and Jukka Corander. Estimating the transmission dynamics of *Streptococcus pneumoniae* from strain prevalence data. *Biometrics*, 69(3):748–757, 2013.
73. Eli Packer, Peter Bak, Mikko Nikkilä, Valentin Polishchuk, and Harold-Jeffrey Ship. Visual analytics for spatial clustering: Using a heuristic approach for guided exploration. *IEEE Transactions on Visualization and Computer Graphics*, 19(12):2179–2188, 2013.
74. Jussi Palomäki, Ilkka Kosunen, Kai Kuikkaniemi, Tetsuo Yamabe, and Niklas Ravaja. Anticipatory electrodermal activity and decision making in a computer poker-game. *Journal of Neuroscience, Psychology, and Economics*, 6(1):55–70, 2013.
75. Pekka Parviainen and Mikko Koivisto. Finding optimal Bayesian networks using precedence constraints. *Journal of Machine Learning Research*, 14:1387–1415, 2013.
76. Mikko Pervilä, Lassi Remes, and Jussi Kangasharju. Harvesting heat in an urban greenhouse. *SIGMETRICS Performance Evaluation Review*, 41(3):95–97, 2013.
77. Weixiong Rao, Lei Chen, and Sasu Tarkoma. Toward efficient filter privacy-aware content-based pub/sub systems. *IEEE Transactions on Knowledge and Data Engineering*, 25(11):2644–2657, 2013.
78. Niklas Ravaja, Outi Somervuori, and Mikko Salminen. Predicting purchase decision: The role of hemispheric asymmetry over the frontal cortex. *Journal of Neuroscience, Psychology, and Economics*, 6(1):1–13, 2013.
79. Juho Rousu, Daniel D. Agranoff, Olugbemiro Sodeinde, John Shawe-Taylor, and Delmiro Fernandez-Reyes. Biomarker discovery by sparse canonical correlation analysis of complex clinical phenotypes of tuberculosis and malaria. *PLOS Computational Biology*, 9(4):1003018, 2013.
80. Tuukka Ruotsalo and Matias Frosterus. Diversifying semantic entity search: Independent component analysis approach. *International Journal of Semantic Computing*, 7(4), 2013.
81. Tuukka Ruotsalo, Krister Haav, Antony Stoyanov, Sylvain Roche, Elena Fani, Romina Deliai, Eetu Mäkelä, Tomi Kauppinen, and Eero Hyvönen. SMARTMUSEUM: A mobile recommender system for the web of data. *Journal of Web Semantics*, 20:50–67, 2013.
82. Mikko Salminen, Niklas Ravaja, Kari Kallinen, and Timo Saari. Mediated cues of group emotion during knowledge-work tasks: Effects on subjective and physiological responses. *Interacting with Computers*, 25(1):60–73, 2013.
83. Hiroaki Sasaki, Michael U. Gutmann, Hayaru Shouno, and Aapo Hyvärinen. Correlated topographic analysis. *Machine Learning*, 92(2-3):285–317, 2013.

84. André Schumacher, Luca Pireddu, Aleksi Kallio, Matti Niemenmaa, Eija Korpelainen, Gianluigi Zanetti, and Keijo Heljanko. Scripting for large-scale sequencing based on Hadoop. *EMBnet.journal*, 19(A):84–85, 2013.
85. Deborah Serrien and Michiel Sovijärvi-Spapé. Cognitive control of response inhibition and switching: Hemispheric lateralization and hand preference. *Brain and Cognition*, 82(3):283–290, 2013.
86. Marcus A. Shephard, Vicki M. Fleming, Thomas R. Connor, Jukka Corander, Edward J. Feil, Christophe Fraser, and William P. Hanage. Historical zoonoses and other changes in host tropism of *Staphylococcus aureus*, identified by phylogenetic analysis of a population dataset. *PLoS One*, 8(5), 2013.
87. Jukka Siren, William P. Hanage, and Jukka Corander. Inference on population histories by approximating infinite alleles diffusion. *Molecular Biology and Evolution*, 30(2):457–468, 2013.
88. Outi Somervuori and Niklas Ravaja. Purchase behavior and psychophysiological responses to different price levels. *Psychology & Marketing*, 30(6):479–489, 2013.
89. Michiel Sovijärvi-Spapé, J. Matias Kivikangas, Simo Järvelä, Ilkka Kosunen, Giulio Jacucci, and Niklas Ravaja. Keep your opponents close: Social context affects EEG and fEMG linkage in a turn-based computer game. *PLOS ONE*, 8(11):78795, 2013.
90. Mikael Sunnaker, Alberto Giovanni Busetto, Elina Numminen, Jukka Corander, Matthieu Foll, and Christophe Dessimoz. Approximate Bayesian computation. *PLoS Computational Biology*, 9(1), 2013.
91. Jukka Suomela. Survey of local algorithms. *ACM Computing Surveys*, 45(2):Article No. 24, 2013.
92. Sasu Tarkoma and Heikki Ailisto. The Internet of Things program: The Finnish perspective. *IEEE Communications Magazine*, 51(3):10–11, 2013.
93. Alexandru I. Tomescu, Anna Kuosmanen, Romeo Rizzi, and Veli Mäkinen. A novel min-cost flow method for estimating transcript expression with RNA-Seq. *BMC Bioinformatics*, 14((Suppl 5):S15), 2013.
94. Stephan Verschoor, Michiel Sovijärvi-Spapé, Szilvia Biro, and Bernhard Hommel. From outcome prediction to action selection: Developmental change in the role of action-effect bindings. *Developmental Science*, 16(6):801–814, 2013.
95. Sami Vihavainen and Kaisa Väänänen-Vainio-Mattila. The implications of mobile notifications for user experience of a social network service. *International Journal of Interactive Mobile Technologies*, 7(2), 2013.
96. Perttu Virtanen. Football Dataco v Sportradar: Second half and home field for database makers. *SRIPTed*, 10(2):278–286, 2013.
97. Lu-Lu Wu, Hai-Jun Zhou, Mikko Alava, Erik Aurell, and Pekka Orponen. Witness of unsatisfiability for a random 3-satisfiability formula. *Physical Review E*, 87(5):052807, 2013.
98. Yu Xiao, Yong Cui, Petri Savolainen, Matti Siekkinen, An Wang, Liu Yang, Antti Ylä-Jääski, and Sasu Tarkoma. Modeling energy consumption of data transmission over wi-fi. *IEEE Transactions on Mobile Computing*, 99(1):1–14, 2013.
99. Husein Birkan Yilmaz, Suzan Bayhan, Tuna Tugcu, and Fatih Alagöz. Radio environment map as enabler for practical cognitive radio networks. *IEEE Communications Magazine*, 51(12):162–169, 2013.
100. Changhe Yuan and Brandon Malone. Learning optimal Bayesian networks: A shortest path perspective. *Journal of Artificial Intelligence Research*, 48:23–65, 2013.
101. Pirkka Aman and Lassi A. Liikkanen. Painting the city with music: context-aware mobile services for urban environment. *Continuum: Journal of Media & Cultural Studies*, 27(4):542–557, 2013.

D.2. Articles in international edited works and conference proceedings with referee practice

1. Prem Raj Adhikari and Jaakko Hollmen. Mixture models from multiresolution 0-1 data. In Johannes Fürnkranz, Eyke Hüllermeier, and Tomoyuki Higuchi, editors, Proceedings of Sixteenth International Conference on Discovery Science (DS 2013), pages 1–16, Berlin Heidelberg, 2013. Springer.
2. Parth Amin and Antti Ylä-Jääski. Improved handover mechanisms to reduce packet forwarding in LTE-Advanced. In 9th International Wireless Communications and Mobile Computing Conference. IEEE, July 2013.
3. Kumaripaba Athukorala, Eve Hoggan, Tuukka Ruotsalo, and Giulio Jacucci. Information-seeking behaviors of computer scientists: Challenges for electronic literature search tools. In Proceedings of ASIS&T, Canada, 2013, USA, 2013.
4. Per Austrin, Petteri Kaski, Mikko Koivisto, and Jussi Määttä. Space-time tradeoffs for subset sum: An improved worst case algorithm. In Fedor V. Fomin, Rusins Freivalds, Marta Kwiatkowska, and David Peleg, editors, Automata, Languages and Programming, 40th International Colloquium, ICALP 2013, Riga, Latvia, July 8-12, 2013, Proceedings, Part I, pages 45–56, Berlin, July 2013. Springer.
5. Suzan Bayhan, Esa Hyytiä, Jussi Kangasharju, and Jörg Ott. Seeker-assisted information search in mobile clouds. In Proceedings of the Second ACM SIGCOMM Workshop on Mobile Cloud Computing (MCC'13), pages 9–14, 2013.
6. Djamel Belazzougui, Fabio Cunial, Juha Kärkkäinen, and Veli Mäkinen. Versatile succinct representations of the bidirectional Burrows-Wheeler transform. In Proceedings of the 21st Annual European Symposium on Algorithms (ESA 2013), Lecture Notes in Computer Science, pages 133–144. Springer Berlin Heidelberg, 2013.
7. Djamel Belazzougui, Travis Gagie, and Gonzalo Navarro. Better space bounds for parameterized range majority and minority. In Proceedings of the 13th International Symposium on Algorithms and Data Structures (WADS 2013), Lecture Notes in Computer Science, pages 121–132. Springer-Verlag, 2013.
8. Djamel Belazzougui, Adeline Pierrot, Mathieu Raffinot, and Stéphane Vialette. Single and multiple consecutive permutation motif search. In Proceedings of the 24th International Symposium on Algorithms and Computation (ISAAC 2013), Lecture Notes in Computer Science, pages 66–77. Springer Berlin Heidelberg, 2013.
9. Anton Belov, Matti Järvisalo, and Joao Marques-Silva. Formula preprocessing in MUS extraction. In Proceedings of the 19th International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS 2013), held as Part of the European Joint Conferences on Theory and Practice of Software (ETAPS 2013), Lecture Notes in Computer Science, pages 108–123. Springer Berlin Heidelberg, 2013.
10. Jeremias Berg and Matti Järvisalo. Optimal correlation clustering via MaxSAT. In Wei Ding, Takashi Washio, Hui Xiong, George Karypis, Bhavani M. Thuraisingham, Diane J. Cook, and Xindong Wu, editors, Proceedings of the 2013 IEEE 13th International Conference on Data Mining Workshops (ICDMW 2013), pages 750–757. IEEE Press, 2013.
11. Joanna Bergström-Lehtovirta, Tommy Eklund, Antti Jylhä, Kai Kuikkaniemi, Chao An, and Giulio Jacucci. BubblesDial: Exploring large display content graphs on small devices. In Proceedings of the 12th International Conference on Mobile and Ubiquitous Multimedia (MUM'13). ACM New York, NY, USA, 2013.
12. Sourav Bhattacharya, Santi Phithakitnukoon, Petteri Nurmi, Arto Klami, Marco Veloso, and Carlos Bento. Gaussian process-based predictive modeling for bus ridership. In Proceedings of the 2013 ACM Conference on Pervasive and Ubiquitous Computing Adjunct Publication (UbiComp '13 Adjunct), pages 1189–1198, 2013.

13. Albert Bifet, Jesse Read, Bernhard Pfahringer, Geoff Holmes, and Indre Zliobaite. CD-MOA: Change detection framework for massive online analysis. In Proceedings of the 20th International Symposium on Intelligent Data Analysis, pages 92–103, October 2013.
14. Albert Bifet, Jesse Read, Indre Zliobaite, Bernhard Pfahringer, and Geoff Holmes. Pitfalls in benchmarking data stream classification and how to avoid them. In Proceedings of the European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECMLPKDD), pages 465–479, September 2013.
15. Andreas Björklund, Petteri Kaski, and Lukasz Kowalik. Probably optimal graph motifs. In Natacha Portier and Thomas Wilke, editors, 30th International Symposium on Theoretical Aspects of Computer Science (STACS 2013), pages 20–31. Schloss Dagstuhl – Leibniz Center for Informatics, 2013.
16. Jori Bomanson and Tomi Janhunen. Normalizing cardinality rules using merging and sorting constructions. In Pedro Cabalar and Tran Cao Son, editors, Logic Programming and Nonmonotonic Reasoning, pages 187–199, Berlin, September 2013. Springer.
17. Sanjay Chawla and Aristides Gionis. k-means—: A unified approach to clustering and outlier detection. In Proceedings of the 13th SIAM International Conference on Data Mining, pages 189–197, 2013.
18. Taejoong Chung, Jinyoung Han, Hojin Lee, Jussi Kangasharju, Taekyoung Kwon, and Yanghee Choi. Spatial and temporal locality of content in bittorrent: A measurement study. In IFIP Networking Conference, pages 1–9, 2013.
19. Ferdinando Cicalese, Travis Gagie, Emanuele Giaquinta, Eduardo Sany Laber, Zsuzsanna Lipták, Romeo Rizzi, and Alexandru Tomescu. Indexes for jumbled pattern matching in strings, trees and graphs. In Proceedings of the 20th International Symposium on String Processing and Information Retrieval (SPIRE 2013), Lecture Notes in Computer Science, pages 56–63. Springer International Publishing, 2013.
20. Jukka Corander, Tomi Janhunen, Jussi Rintanen, Henrik Nyman, and Johan Pensar. Learning chordal Markov networks by constraint satisfaction. In Chris Burges, Leon Bottou, Max Welling, Zoubin Ghahramani, and Kilian Weinberger, editors, Advances in Neural Information Processing Systems, Volume 26, pages 1359–1357. Neural Information Processing Systems Foundation, December 2013.
21. Eugen Czeizler and Pekka Orponen. Yield optimization strategies for DNA staged tile assembly systems. In A.-H. Dediu, C. Martin-Vide, B. Truthe, and M. A. Vega-Rodriguez, editors, Proceedings of the 2nd International Conference on the Theory and Practice of Natural Computing (TPNC 2013, Cáceres, Spain, Dec 2013), pages 31–44, Berlin Heidelberg, December 2013. Springer-Verlag.
22. Mahashweta Das, Gianmarco De Francisci Morales, Aristides Gionis, and Ingmar Weber. Learning to question: leveraging user preferences for shopping advice. In Proceedings of the 19th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2013), pages 203–211, August 2013.
23. Danny Dolev, Janne H. Korhonen, Christoph Lenzen, Jukka Suomela, and Joel Rybicki. Synchronous counting and computational algorithm design. In Proceedings of the 15th International Symposium on Stabilization, Safety, and Security of Distributed Systems (SSS 2013), Lecture Notes in Computer Science, pages 237–250, 2013.
24. Alon Efrat, Mikko Nikkilä, and Valentin Polishchuk. Sweeping a terrain by collaborative aerial vehicles. In Proceedings of the 21st ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (SIGSPATIAL'13), pages 4–13, 2013.
25. Seppo Enarvi and Mikko Kurimo. A novel discriminative method for pruning pronunciation dictionary entries. In Proceedings of the 7th International Conference on Speech Technology and Human-Computer Dialogue (SpeD 2013), pages 113–116, October 2013.
26. Doris Entner, Patrik Hoyer, and Peter Spirtes. Data-driven covariate selection for non-parametric estimation of causal effects. In Proceedings of the 16th International Conference on Artificial Intelligence and Statistics (AISTATS'13), pages 256–264, 2013.

27. Martino Fantato, Benjamin Cowley, and Niklas Ravaja. Arousing learning: Real-time emotion recognition for technology-enhanced learning. In *eChallenges e-2013 Conference Proceedings*, pages 1–8, October 2013.
28. Fedor Fomin, Petr Golovach, and Janne H. Korhonen. On the parameterized complexity of cutting a few vertices from a graph. In *Proceedings of the 38th International Symposium on Mathematical Foundations of Computer Science 2013 (MFCS 2013)*, Lecture Notes in Computer Science, pages 421–432. Springer, 2013.
29. Pierre Fraigniaud, Mika Göös, Amos Korman, and Jukka Suomela. What can be decided locally without identifiers? In *Proceedings of the 2013 ACM Symposium on Principles of Distributed Computing (PODC'13)*, pages 157–165, 2013.
30. Travis Gagie, Pawel Gawrychowski, and Yakov Nekrich. Heaviest induced ancestors and longest common substrings. In *Proceedings of Canadian Conference on Computational Geometry (CCCG'13)*, 2013.
31. Travis Gagie, Wing-Kai Hon, and Tsung-Han Ku. New algorithms for position heaps. In *Proceedings of the 24th Annual Symposium on Combinatorial Pattern Matching (CPM 2013)*, Lecture Notes in Computer Science, pages 95–106. Springer Berlin Heidelberg, 2013.
32. Ivan Galov, Rustam Kadirov, Andrew Vasilev, and Dmitry Korzun. Event recording in smart room. In Sergey Balandin and Uliya Trifonova, editors, *Proceedings of the 13th Conference of Open Innovations Association FRUCT and 2nd Seminar on e-Tourism for Karelia and Oulu Region*, pages 20–28. State University of Aerospace Instrumentation (SUAI), St.-Petersburg, Russia, 2013.
33. Vaibhav Garg, Sameer Patil, Apu Kapadia, and L. Jean Camp. Peer-produced privacy protection. In *2013 IEEE Symposium on Technology & Society*, pages 147–154, Toronto, Canada, 2013.
34. Vaibhav Garg, Sameer Patil, Apu Kapadia, and L. Jean Camp. Peer-produced privacy protection: A common-pools approach. In *Special Workshop on Information Privacy, iConference 2013*, page 8, Fort Worth, TX, USA, February 2013.
35. Emanuele Giaquinta, Kimmo Fredriksson, Szymon Grabowski, and Esko Ukkonen. Motif matching using gapped patterns. In Thierry Lecroq and Laurent Mouchard, editors, *IWOCA*, volume 8288 of *Lecture Notes in Computer Science*, pages 448–452. Springer, 2013.
36. Aristides Gionis, Evimaria Terzi, and Panayiotis Tsaparas. Opinion maximization in social networks. In *Proceedings of the 13th SIAM International Conference on Data Mining*, pages 387–395, May 2013.
37. Dorota Głowacka, Tuukka Ruotsalo, Ksenia Konyushkova, Kumaripaba Athukorala, Samuel Kaski, and Giulio Jacucci. Directing exploratory search: Reinforcement learning from user interactions with keywords. In *Proceedings of IUI'13, International Conference on Intelligent User Interfaces*, pages 117–128, New York, March 2013. ACM.
38. Dorota Głowacka, Tuukka Ruotsalo, Ksenia Konyushkova, Kumaripaba Athukorala, Samuel Kaski, and Giulio Jacucci. SciNet: A system for browsing scientific literature through keyword manipulation. In *IUI'13 Companion, International Conference on Intelligent User Interfaces*, pages 61–62, New York, March 2013. ACM.
39. Mehmet Gönen, Suleiman A. Khan, and Samuel Kaski. Kernelized Bayesian matrix factorization. In *Proceedings of the 30th International Conference on Machine Learning, ICML 2013, Atlanta, GA, USA, 16-21 June 2013*, volume 28 of *JMLR Proceedings*, pages 864–872, 2013.
40. Oskar Gross, Antoine Doucet, and Hannu Toivonen. Named entity filtering based on concept association graphs. In *Proceedings of the 14th International Conference on Intelligent Text Processing and Computational Linguistics (CICLing'13)*, 2013.
41. Hannes Heikinheimo and Antti Ukkonen. The Crowd-Median algorithm. In *AAAI Conference on Human Computation and Crowdsourcing*, pages 69–77, November 2013.

42. Samuli Hemminki, Petteri Nurmi, and Sasu Tarkoma. Accelerometer-based transportation mode detection on smartphones. In Proceedings of the 11th ACM Conference on Embedded Networked Sensor Systems, 2013.
43. Marijn Heule, Matti Järvisalo, and Armin Biere. Covered clause elimination. In Short Paper Proceedings of the 17th International Conference on Logic for Programming, Artificial Intelligence and Reasoning, Easy-Chair Proceedings in Computing, pages 41–46, 2013.
44. Marijn Heule, Matti Järvisalo, and Armin Biere. Revisiting hyper binary resolution. In Proceedings of the 10th International Conference on Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems (CPAIOR 2013), Lecture Notes in Computer Science, pages 77–93. Springer-Verlag Berlin Heidelberg, 2013.
45. Christina Hochleitner, Sameer Patil, Trenton Schulz, Rob Reeder, Mark Busch, and Manfred Tscheligi. A turn for the worse: Designing trustbusters for user interfaces. In Workshop proposal, SOUPS 2013: The Ninth Symposium on Usable Security and Privacy, page 6, USA, July 2013.
46. Eve Hoggan, Miguel Nacenta, Per Ola Kristensson, John Williamson, Antti Oulasvirta, and Anu Lehtiö. Multi-touch pinch gestures: performance and ergonomics. In Proceedings of the 2013 ACM International Conference on Interactive Tabletops and Surfaces (ITS'13), pages 219–222, 2013.
47. Eve Hoggan, John Williamson, Antti Oulasvirta, Miguel Nacenta, Per Ola Kristensson, and Anu Lehtiö. Multi-touch rotation gestures: performance and ergonomics. In SIGCHI Conference on Human Factors in Computing Systems, pages 3047–3050, 2013.
48. Antti Honkela, Magnus Rattray, and Neil D. Lawrence. Mining regulatory network connections by ranking transcription factor target genes using time series expression data. In Hiroshi Mamitsuka, Charles DeLisi, and Minoru Kanehisa, editors, Data Mining for Systems Biology, Methods in Molecular Biology, pages 59–67. 2013.
49. Chittaranjan Hota, Vikram Nunia, Mario Di Francesco, Jukka K. Nurminen, and Antti Ylä-Jääski. Enhanced search in unstructured peer-to-peer overlay networks. In The 8th International Conference on Grid and Pervasive Computing (GPC 2013), pages 270–279, May 2013.
50. Antti Hyttinen, Patrik Hoyer, Frederick Ederhardt, and Matti Järvisalo. Discovering cyclic causal models with latent variables. In Proceedings of the Twenty-Ninth Conference on Uncertainty in Artificial Intelligence (UAI'13), pages 301–310, 2013.
51. Sampsa Hyysalo and Mikael Johnson. The user as a relational category. In Co-Create 2013 The Boundary-Crossing Conference on Co-Design in Innovation, page 62, June 2013.
52. Dino Ienco, Albert Bifet, Indre Zliobaite, and Bernhard Pfahringer. Clustering based active learning for evolving data streams. In Proceedings of the 16th International Conference on Discovery Science, pages 79–93, October 2013.
53. Vidit Jain and Esther Galbrun. Topical organization of user comments and application to content recommendation. In Proceedings of the 22nd International World Wide Web Conference (WWW '13), Companion Volume, pages 61–62, 2013.
54. Mikael Johnson. Beyond the single project: Strategic and cumulative co-design. In Co-Create 2013 The Boundary-Crossing Conference on Co-Design in Innovation, page 248, June 2013.
55. Antti Jylhä, Petteri Nurmi, Miika Siren, Samuli Hemminki, and Giulio Jacucci. Matkahupi: a persuasive mobile application for sustainable mobility. In Proceedings of the 2013 ACM Conference on Pervasive and Ubiquitous Computing Adjunct Publication, pages 227–230, 2013.
56. Vesa Kantola, Miska Simanainen, and Olli Pitkänen. Designing the future together – expanding the paradigm by combining futures studies and design games. In Riitta Smeds and Olivier Irrmann, editors, The Boundary-Crossing Conference on Co-Design in Innovation (Co-Create), pages 589–600, 2013.

57. Roland Kindermann, Tommi Junntila, and Ilkka Niemelä. Bounded model checking of an MITL fragment for timed automata. In 13th International Conference on Application of Concurrency to System Design (ACSD), pages 216–225. IEEE, 2013.
58. Reuben Kirkham, Aftab Khan, Sourav Bhattacharya, Nils Hammerla, Sebastian Mellor, Daniel Roggen, and Thomas Plötz. Automatic correction of annotation boundaries in activity datasets by class separation maximization. In Proceedings of the 2013 ACM Conference on Pervasive and Ubiquitous Computing Adjunct Publication (UbiComp '13 Adjunct), pages 673–678, 2013.
59. Janne H. Korhonen and Pekka Parviainen. Exact learning of bounded tree-width Bayesian networks. In Proceedings of the Sixteenth International Conference on Artificial Intelligence and Statistics (AISTATS 2013), JMLR: Workshop and Conference Proceedings, pages 370–378. JMLR, 2013.
60. Dmitry Korzun, Sergey Balandin, and Andrei Gurtov. Deployment of smart spaces in Internet of Things: Overview of the design challenges. In Sergey Balandin, Sergey Andreev, and Yevgeni Koucheryav, editors, Internet of Things, Smart Spaces, and Next Generation Networking. 13th International Conference, NEW2AN 2013 and 6th Conference, ruSMART 2013, St. Petersburg, Russia, August 28-30, 2013. Proceedings, pages 48–59, Berlin Heidelberg, 2013. Springer-Verlag.
61. Dmitry Korzun, Ivan Galov, and Sergey Balandin. Smart room services on top of m3 spaces. In Sergey Balandin and Ulia Trifonova, editors, Proceedings of the 14th Conference of Open Innovations Association FRUCT, Helsinki, Finland, page 44, St.-Petersburg, Russia, 2013. State University of Aerospace Instrumentation (SUAI).
62. Ilkka Kosunen, Antti Jylhä, Imtiaz Ahmed, Chao An, Luca Chech, Luciano Gamberini, Marc Cavazza, and Giulio Jacucci. Comparing eye and gesture pointing to drag items on large screens. In Proceedings of the 2013 ACM International Conference on Interactive Tabletops and Surfaces (ITS'13), pages 425–428, 2013.
63. Kai Kuikkaniemi. Producing live participation with big screen: case study of constructive design of Kupla UI. In Proceedings of the 2013 ACM International Conference on Interactive Tabletops and Surfaces (ITS '13), pages 457–462, 2013.
64. Kai Kuikkaniemi, Matti Nelimarkka, Petri Lievonen, and Jukka Reitmaa. Metagroups: a method for collective innovation at large conferences. In CO-CREATE 2013. The Boundary Crossing Conference on Co-Design in Innovation, pages 635–646, 2013.
65. Kai Kuikkaniemi, Max Vilkki, Jouni Ojala, Matti Nelimarkka, and Giulio Jacucci. A generic interactive wall user interface based on spherical widgets. In Proceedings of the 2013 ACM International Conference on Interactive Tabletops and Surfaces (ITS'13), pages 301–304, 2013.
66. Tuomas Kuismin and Keijo Heljanko. Increasing confidence in liveness model checking results with proofs. In The 9th International Haifa Verification Conference (HVC 2013), pages 32–43, November 2013.
67. Pardeep Kumar, Pawani Porambage, Mika Ylianttila, and Andrei Gurtov. A mobile object-based secret key distribution scheme for wireless sensor networks. In The 10th IEEE International Conference on Ubiquitous Intelligence and Computing (UIC-2013), December 2013.
68. Dmitriy Kuptsov, Boris Nechaev, Andrei Gurtov, and Andrey Lukyanenko. A novel demand-aware fairness metric for IEEE 802.11 wireless networks. In Proceedings of the 28th Annual ACM Symposium on Applied Computing (SAC '13), pages 603–610, New York, NY, USA, 2013. ACM.
69. Konstantin Kutzkov, Albert Bifet, Francesco Bonchi, and Aristides Gionis. Strip: stream learning of influence probabilities. In Proceedings of the 19th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, pages 275–283, August 2013.
70. Kari Kähkönen, Olli Saarikivi, and Keijo Heljanko. LCT: A parallel distributed testing tool for multithreaded Java programs. In Proceedings the Sixth International Workshop on the Practical Application of Stochastic Modelling (PASM) and the Eleventh International Workshop on Parallel and Distributed Methods in Verification (PDMC), pages 253–259, September 2013.

71. Airi Lampinen, Vilma Lehtinen, Coye Cheshire, and Emmi Suhonen. Indebtedness and reciprocity in local online exchange. In *ACM Conference on Computer Supported Cooperative Work*, pages 661–671, February 2013.
72. Ming Li, Andrey Lukyanenko, Sasu Tarkoma, Yong Cui, and Antti Ylä-Jääski. Tolerating path heterogeneity in multipath TCP with bounded receive buffers. In *Proceedings of the ACM SIGMETRICS, International Conference on Measurement and Modeling of Computer Systems*, pages 375–376, 2013.
73. Ming Li, Andrey Lukyanenko, Sasu Tarkoma, and Antti Ylä-Jääski. Efficient new delayed ACK for TCP: old problem, new insight. In *Proceedings of the ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems*, pages 355–364, 2013.
74. Ming Li, Andrey Lukyanenko, Antti Ylä-Jääski, and Sasu Tarkoma. The delayed ACK evolution in MPTCP. In *IEEE Global Communications Conference, GLOBECOM 2013*, 2013.
75. Jeffrey Lijffijt. A fast and simple method for mining subsequences with surprising event counts. In Hendrik Blockeel, Kristian Kersting, Siegfried Nijssen, and Filip Zelezny, editors, *Machine Learning and Knowledge Discovery in Databases. European Conference, ECML PKDD 2013, Prague, Czech Republic, September 23–27, 2013, Proceedings*, pages 385–400. Springer Berlin Heidelberg, September 2013.
76. Madhusanka Liyanage, Mika Ylianttila, and Andrei Gurtov. Secure hierarchical virtual private LAN services for provider provisioned networks. In *First IEEE Conference on Communications and Network Security, December 2013*.
77. Brandon Malone and Changhe Yuan. Evaluating anytime algorithms for learning optimal Bayesian networks. In *Proceedings of the Twenty-Ninth Conference on Uncertainty in Artificial Intelligence (UAI'13)*, 2013.
78. Yasir Mehmood, Nicola Barbieri, Francesco Bonchi, and Antti Ukkonen. CSI: community-level social influence analysis. In *European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases*, pages 48–63, September 2013.
79. Julien Mineraud, Sasitharan Balasubramaniam, Jussi Kangasharju, and William Donnelly. Parameterized green gradient based routing (PG2BR) for an energy efficient Internet. In *Proceedings of the 2nd IEEE Online Conference on Green Communications*, 2013.
80. Abdulmelik Mohammed and Eugen Czeizler. Rule-based modelling as a platform for the analysis of synthetic self-assembled nano-systems. In Ion Petre, editor, *Proceedings of the Fourth International Workshop on Computational Models for Cell Processes (Turku, Finland, June 2013)*, Australia, 2013. Open Publishing Association.
81. Kasper Mäki-Reinikka, Jari Tornaiainen, Aleksander Alafuzoff, Henri Kotkanen, and Jukka M. Toivanen. Using galvanic vestibular stimulation to sense abstract data. In *ACE 2013 International Conference on Advances in Computer Entertainment Technology*, 2013.
82. Suneth Namal, Ijaz Ahmad, Andrei Gurtov, and Mika Ylianttila. Enabling secure controller mobility in OpenFlow. In *IEEE Software Defined Networks for Future Networks and Services 2013 - SDN4FNS 2013*, November 2013.
83. Suneth Namal, Ijaz Ahmad, Andrei Gurtov, and Mika Ylianttila. SDN based inter-technology load balancing leveraged by flow admission control. In *IEEE Software Defined Networks for Future Networks and Services 2013 - SDN4FNS 2013*, November 2013.
84. Mai Nguyen, Tomi Janhunen, and Ilkka Niemelä. Translating answer-set programs into bit-vector logic. In Hans Tompits, Salvador Abreu, Johannes Oetsch, Jörg Pührer, Dietmar Seipel, Masanobu Umeda, and Armin Wolf, editors, *Applications of Declarative Programming and Knowledge Management*, pages 95–113, Berlin Heidelberg, September 2013. Springer Verlag.

85. Hieu Nguyen Trung, Mario Di Francesco, and Antti Ylä-Jääski. Extracting knowledge from Wikipedia articles through distributed semantic analysis. In The 13th International Conference on Knowledge Management and Knowledge Technologies (i-KNOW 2013), pages 188–195, September 2013.
86. Teppo Niinimäki and Mikko Koivisto. Annealed importance sampling for structure learning in Bayesian networks. In Proceedings of the Twenty-Third International Joint Conference on Artificial Intelligence, pages 1579–1585, 2013.
87. Teppo Niinimäki and Mikko Koivisto. Treedy: A heuristic for counting and sampling subset. In Proceedings of the Twenty-Ninth Conference on Uncertainty in Artificial Intelligence (UAI-13), pages 469–477, 2013.
88. Ilya Nikolaevskiy, Andrey Lukyanenko, Tatiana Polishchuk, Valentin Polishchuk, and Andrei Gurtov. isBF: Scalable in-packet bloom filter based multicast. In Proceedings of the 28th Annual ACM Symposium on Applied Computing (SAC '13), pages 646–648, New York, NY, USA, 2013. ACM.
89. Javad Nouri, Lidia Pivovarova, and Roman Yangarber. MDL-based models for transliteration generation. In International Conference on Statistical Language and Speech Processing, 2013.
90. Zhonghong Ou, Shichao Dong, Jiang Dong, Jukka K. Nurminen, Antti Ylä-Jääski, and Ren Wang. Characterize energy impact of concurrent network-intensive applications on mobile platforms. In The 8th ACM Workshop on Mobility in the Evolving Internet Architecture (ACM MobiArch 2013), page 6, 2013.
91. Antti Oulasvirta, Teemu Roos, Arttu Modig, and Laura Leppänen. Information capacity of full-body movements. In Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, pages 1289–1298, 2013.
92. Xinru Page, Karen Tang, Fred Stutzman, and Airi Lampinen. Measuring networked social privacy. In Proceedings of the 2013 Conference on Computer Supported Cooperative Work Companion, pages 315–320. ACM, 2013.
93. Joni Pajarinen and Jaakko Peltonen. Expectation maximization for average reward decentralized POMDPs. In Hendrik Blockeel, Kristian Kersting, Siegfried Nijssen, and Filip Zelezny, editors, Proceedings of ECML PKDD 2013, The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, pages 129–144, Berlin Heidelberg, 2013. Springer-Verlag.
94. Sameer Patil. RepliPRI: Challenges in replicating studies of online privacy. In RepliCHI Workshop, CHI 2013: The ACM SIGCHI Conference on Human Factors in Computing Systems, page NA, Paris, France, April 2013.
95. Sameer Patil and Tanvi Vyas. Password knight: Protecting users from insecure password fields. In PETools 2013: Workshop on Privacy Enhancing Tools, page 2, Bloomington, IN, USA, July 2013.
96. Jaakko Peltonen and Ziyuan Lin. Information retrieval perspective to meta-visualization. JMLR W&CP: Proceedings of ACML 2013, Fifth Asian Conference on Machine Learning, (29):165–180, 2013.
97. Jaakko Peltonen and Ziyuan Lin. Multiplicative update for fast optimization of information retrieval based neighbor embedding. In Saeid Sanei, Paris Smaragdis, Asoke Nandi, Anthony T. S. Ho, and Jan Larsen, editors, Proceedings of MLSP 2013, IEEE International Workshop on Machine Learning for Signal Processing, Piscataway, 2013. IEEE.
98. Jaakko Peltonen, Max Sandholm, and Samuel Kaski. Information retrieval perspective to interactive data visualization. In M. Hlawitschka and T. Weinkauff, editors, Proceedings of the Eurographics Conference on Visualization (Eurovis 2013), pages 49–53. The Eurographics Association, 2013.
99. Mikko Pervilä and Jussi Kangasharju. Underfloor air containment. In 2013 IEEE Online Conference on Green Communications (GreenCom), 2013.
100. Pawani Porambage, Pandeep Kumar, Corinna Schmitt, Andrei Gurtov, and Mika Ylianttila. Certificate-based pairwise key establishment protocol for wireless sensor networks. In IEEE 10th International Conference on Embedded Software and Systems (ICCESS2013), December 2013.

101. Simon Puglisi and Dominik Kempa. Lempel-Ziv factorization: Simple, fast, practical. In Proceedings of the Meeting on Algorithm Engineering and Experiments (ALENEX), pages 103–112, 2013.
102. Weixiong Rao, Lei Chen, Pan Hui, and Sasu Tarkoma. Bitlist: New full-text index for low space cost and efficient keyword search. In Proceedings of the 39th International Conference on Very Large Data Bases, pages 1522–1533. Association for Computing Machinery, 2013.
103. Sami Remes, Arto Klami, and Samuel Kaski. Characterizing unknown events in MEG data with group factor analysis. In Machine Learning and Interpretation in Neuroimaging (MLINI'13), 2013.
104. Ulpu Remes. Bounded conditional mean imputation with an approximate posterior. In Proc. INTERSPEECH, pages 3007–3011, August 2013.
105. Jussi Rintanen. Scheduling with contingent resources and tasks. In Proceedings of the International Conference on Automated Planning and Scheduling, ICAPS 2013, pages 189–196. AAAI Press, June 2013.
106. Jussi Rintanen and Charles Orgill Gretton. Computing upper bounds on lengths of transition sequences. In IJCAI 2013, Proceedings of the International Joint Conference on Artificial Intelligence, pages 2365–2372. AAAI Press, August 2013.
107. Eduardo J. Ruiz, Vagelis Hristidis, Carlos Castillo, and Aristides Gionis. Measuring and summarizing movement in microblog postings. In Proceedings of the Seventh International Conference on Weblogs and Social Media, July 2013.
108. Tuukka Ruotsalo, Kumaripaba Athukorala, Dorota Głowacka, Ksenia Konyushkova, Antti Oulasvirta, Samuli Kaipainen, Samuel Kaski, and Giulio Jacucci. Supporting exploratory search tasks with interactive user modelling. In Proceedings of ASIST 2013, the 76th ASIS&T Annual Meeting: Beyond the Cloud: Rethinking Information Boundaries, Silver Spring, 2013. Association for Information Science and Technology.
109. Tuukka Ruotsalo and Matias Frosterus. Semantic entity search diversification. In Randall Bilof, editor, Semantic Computing (ICSC), 2013 IEEE Seventh International Conference on, pages 32–39. IEEE, Los Alamitos, USA, 2013.
110. Tuukka Ruotsalo, Jaakko Peltonen, Manuel Eugster, Dorota Głowacka, Ksenia Konyushkova, Kumaripaba Athukorala, Ilkka Kosunen, Aki Reijonen, Petri Myllymäki, Giulio Jacucci, and Samuel Kaski. Directing exploratory search with interactive intent modeling. In Qi He, Arun Iyengar, Wolfgang Nejdl, Jian Pei, and Rajeer Rastogi, editors, Proceedings of the 22nd ACM International Conference on Information & Knowledge Management, pages 1759–1764, New York, NY, USA, 2013. ACM.
111. Sumanta Saha, Andrey Lukyanenko, and Antti Ylä-Jääski. Cooperative caching through routing control in information-centric networks. In The 32nd IEEE International Conference on Computer Communications (INFOCOM 2013), pages 100–104, Turin, Italy, April 2013. IEEE.
112. Petri Savolainen, Sumi Helal, Jukka Reitmaa, Kai Kuikkaniemi, Giulio Jacucci, Mikko Rinne, Marko Turpeinen, and Sasu Tarkoma. Spaceify: A client-edge-server ecosystem for mobile computing in smart spaces. In Proceedings of the 19th Annual International Conference on Mobile Computing & Networking (MobiCom '13), pages 211–214, 2013.
113. Stefan Schmid and Jukka Suomela. Exploiting locality in distributed SDN control. In Proceedings of the 2013 ACM SIGCOMM Workshop on Hot Topics in Software Defined Networking (HotSDN'13), pages 121–126, 2013.
114. Oliver Schoenleben and Antti Oulasvirta. Sandwich keyboard: Fast ten-finger typing on a mobile device with adaptive touch sensing on the back side. In MobileHCI '13: Proceedings of the 15th International Conference on Human-computer Interaction with Mobile Devices and Services, page 178. ACM, New York, USA, 2013.
115. Antti Siirtola and Keijo Heljanko. Parametrised compositional verification with multiple process and data types. In J. Carmona, M. T. Lazarescu, and M. Pietkiewicz-Koutny, editors, Proceedings, 13th International Conference on Application of Concurrency to System Design (ACSD), pages 67–76. IEEE, July 2013.

116. Srishti Srivastava, Brandon Malone, Nitin Sukhija, Ioana Banicescu, and Florina M. Ciorba. Predicting the flexibility of dynamic loop scheduling using an artificial neural network. In Proceedings of the 12th International Symposium on Parallel and Distributed Computing, pages 3–10, 2013.
117. Hongyu Su and Juho Rousu. Multilabel classification through random graph ensembles. In Proceedings, 5th Asian Conference on Machine Learning (ACML2013), pages 404–418, November 2013.
118. Namal Suneth, Konstantinos Georganta, and Andrei Gurtov. Lightweight authentication and key management on 802.11 with elliptic curve cryptography. In IEEE Wireless Communications and Networking Conference (WCNC), pages 1–6, April 2013.
119. Nikolaj Tatti. Itemsets for real-valued datasets. In Proceedings of the 13th IEEE International Conference on Data Mining (ICDM 2013), 2013.
120. Nikolaj Tatti and Aristides Gionis. Discovering nested communities. In Machine Learning and Knowledge Discovery in Databases (ECMLPKDD), pages 32–47, September 2013.
121. Jukka Toivanen, Matti Järvisalo, and Hannu Toivonen. Harnessing constraint programming for poetry composition. In The Fourth International Conference on Computational Creativity, pages 160–167, 2013.
122. Jukka Toivanen, Hannu Toivonen, and Alessandro Valitutti. Automatical composition of lyrical songs. In The Fourth International Conference on Computational Creativity, 2013.
123. Alexandru I. Tomescu, Anna Kuosmanen, Romeo Rizzi, and Veli Mäkinen. A novel combinatorial method for estimating transcript expression with RNA-Seq: Bounding the number of paths. In Proceedings of the 13th International Workshop on Algorithms in Bioinformatics (WABI 2013), Lecture Notes in Computer Science, pages 85–98. Springer Berlin Heidelberg, 2013.
124. Charalampos Tsourakakis, Francesco Bonchi, Aristides Gionis, Francesco Gullo, and Maria A. Tsiarli. Denser than the densest subgraph: extracting optimal quasi-cliques with quality guarantees. In Proceedings of the 19th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining KDD 2013, pages 104–112, August 2013.
125. Alessandro Valitutti, Antoine Doucet, Jukka Toivanen, and Hannu Toivonen. Let everything turn well in your wife: Generation of adult humor using lexical constraints. In The 51st Annual Meeting of the Association for Computational Linguistics (ACL), Volume 2: Short Papers, page 243, 2013.
126. Matthijs van Leeuwen and Antti Ukkonen. Discovering skylines of subgroup sets. In European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECMLPKDD), pages 272–287, September 2013.
127. Andrey Vdovenko, Sergey Marchenkov, and Dmitry Korzun. Mobile multi-service smart room client: Initial study for multi-platform development. In Sergey Balandin and Uliya Trifonova, editors, Proceedings of the 13th Conference of Open Innovations Association FRUCT and 2nd Seminar on e-Tourism for Karelia and Oulu Region, pages 143–152. State University of Aerospace Instrumentation (SUAI), St.-Petersburg, Russia, 2013.
128. Sami Vihavainen, Kimmo Karhu, and Andrea Botero. Connecting stakeholders through context logging. In 15th International Conference on Human-Computer Interaction with Mobile Devices and Services, pages 504–509, August 2013.
129. Perttu Virtanen, Rosa Maria Ballardini, Pamela Lönnqvist, Nari Lee, Marcus Norrgård, and Olli Pitkänen. The one-size fits all European patent system: Challenges in the software context. In Katja Weckström, editor, Governing Innovation and Expression, pages 327–351. Turun yliopisto, Turku, 2013.
130. Kari Visala, Dimitrij Lagutin, and Sasu Tarkoma. Towards a minimal core for information-centric networking. In Alex Galis and Anastasius Gavras, editors, The Future Internet, volume 7858 of Lecture Notes in Computer Science, pages 39–51. Springer Berlin Heidelberg, 2013.

131. Liang Wang, Suzan Bayhan, and Jussi Kangasharju. Cooperation policies for efficient in-network caching. In Proceedings of the ACM SIGCOMM 2013 Conference, pages 533–534, New York, NY, USA, 2013. ACM.
132. Kazuho Watanabe, Teemu Roos, and Petri Myllymäki. Achievability of asymptotic minimax regret in online and batch prediction. In Asian Conference on Machine Learning, Journal of Machine Learning Research: Workshop and Conference Proceedings, pages 181–193, 2013.
133. Siert Wieringa and Keijo Heljanko. Asynchronous multi-core incremental SAT solving. In Proceedings of the 19th International Conference on Tools and Algorithms for the Construction and Analysis of Systems, TA-CAS 2013, pages 139–153, 2013.
134. Siert Wieringa and Keijo Heljanko. Concurrent clause strengthening. In Theory and Applications of Satisfiability Testing - SAT 2013, pages 116–132, 2013.
135. Zhirong Yang, Jaakko Peltonen, and Samuel Kaski. Scalable optimization of neighbor embedding for visualization. In Proceedings of ICML 2013, the 30th International Conference on Machine Learning, pages 127–135. JMLR, June 2013.
136. Salu Ylirisku, Siân Lindley, Giulio Jacucci, Richard Banks, Craig Stewart, Abigail Sellen, Richard Harper, and Tim Regan. Designing web-connected physical artefacts for the 'aesthetic' of the home. In Proceedings of the 2013 ACM Annual Conference on Human Factors in Computing Systems, pages 909–918, 2013.
137. Indre Zliobaite and Jaakko Hollmen. Fault tolerant regression for sensor data. In Proceedings of the European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECMLPKDD), pages 449–464, 2013.

D.3. Scientific monographs and edited books

1. Adrian Balint, Anton Belov, Marijn J.H. Heule, and Matti Järvisalo. Proceedings of SAT Competition 2013: Solver and Benchmark Descriptions, volume B-2013-1 of Department of Computer Science Series of Publications B. University of Helsinki, 2013.
2. Jeremy T. Bradley, Keijo Heljanko, William J. Knottenbelt, and Nigel Thomas. Proceedings of the Sixth International Workshop on the Practical Application of Stochastic Modelling (PASM) and the Eleventh International Workshop on Parallel and Distributed Methods in Verification (PDMC). Electr. Notes Theor. Comput. Sci. 296: (2013). Elsevier, Amsterdam, 2013.
3. Matti Järvisalo and Allen Van Gelder. Proceedings of the 16th International Conference on Theory and Applications of Satisfiability Testing (SAT 2013). Lecture Notes in Computer Science. Springer-Verlag, 2013.
4. Dmitry Korzun and Andrei Gurtov. Structured Peer-to-Peer Systems: Fundamentals of Hierarchical Organization, Routing, Scaling, and Security. Springer, New York, USA, 2013.
5. Olli Pitkänen, Päivi Tiilikka, and Eija Warma. Henkilötietojen suoja. Talentum, Helsinki, 2013.

D.4. Other publications

1. Aaron Yi Ding, Jon Crowcroft, and Sasu Tarkoma. Collaborative communication and sensing for mobile systems. In Doctoral Colloquium of the 11th ACM International Conference on Embedded Networked Sensor Systems (ACM SenSys 2013), 2013.
2. Aaron Yi Ding, Jouni Korhonen, Teemu Savolainen, Markku P I Kojo, Sasu Tarkoma, and Jon Crowcroft. Bridge networking research and Internet standardization: Case study on mobile traffic offloading and IPv6 transition technologies. In Internet Architecture Board Workshop on Internet Technology Adoption and Transition (IAB ITAT 2013), 2013.

3. Emanuele Giaquinta, Kimmo Fredriksson, Szymon Grabowski, Alexandru I. Tomescu, and Esko Ukkonen. Motif matching using gapped patterns. CoRR, abs/1306.2483, 2013.
4. Mohammad Ashraful Hoque, Matti Siekkinen, Jukka K. Nurminen, Mika Aalto, and Sasu Tarkoma. Mobile multimedia streaming: QoE and energy consumption perspective. CoRR, abs/1311.4317, 2013.
5. Markku P I Kojo, Ilpo Järvinen, Hannes Tschofenig, and Aaron Yi Ding. Supporting low latency near the network edge and with challenging link technologies. In Internet Society (ISOC) Workshop on Reducing Internet Latency, 2013.
6. Airi Lampinen, Jesse Haapoja, Johannes Koponen, and Juha Leppänen. Social media as personal informatics: Empowerment through self-reflection. In CHI'13 Workshop on Personal Informatics in the Wild: Hacking Habits for Health and Happiness, Paris, France, 2013.
7. Airi Lampinen, Emmi Suhonen, and Vilma Lehtinen. Verkko palvelut paikallisyhteisöjen arjessa. käyttäjätutkimus living lab -ympäristöissä. In Salla-Maaria Laaksonen, Janne Matikainen, and Minttu Tikka, editors, Otteita verkosta. Verkon ja sosiaalisen median tutkimusmenetelmät., pages 339–354. Vastapaino, Tampere, 2013.
8. Asko Lehmuskallio. Näkökulmia valokuviin taiteilijoilta, kuraattoreilta ja tutkijoilta. Kulttuurintutkimus, 29(4), 2013.
9. Boris Nechaev, Vern Paxson, Mark Allman, Mike Bennett, and Andrei Gurtov. Towards methodical calibration: A case study of enterprise switch measurements. Technical Report TR-13-005, Berkeley, USA, 2013.
10. Matti Nelimarkka, Kai Kuikkaniemi, Jukka Reitmaa, and Petri Lievonen. Presemo - a live participation tool. In Interaktiivinen tekniikka koulutuksessa 10.-12.4.2013, pages 119–123, 2013.
11. Teemu Roos and Yuan Zou. Keep it simple stupid - on the effect of lower-order terms in BIC-like criteria. In Conference Proceedings of Information Theory and Applications Workshop (ITA 2013), 2013.
12. Mikhail Shubin. Decomposing the bacterial phenotypic time-series into biologically-meaningful components. In Bioinformatics Research and Education Workshop, 2013.
13. Hannu Toivonen, Oskar Gross, Jukka M. Toivanen, and Alessandro Valitutti. On creative uses of word associations. In Synergies of Soft Computing and Statistics for Intelligent Data Analysis, Advances in Intelligent Systems and Computing, pages 17–24. Springer, 2013.
14. Antti Ukkonen. Big data ja laskennalliset menetelmät. In Salla-Maaria Laaksonen, Janne Matikainen, and Minttu Tikka, editors, Otteita verkosta, verkon ja sosiaalisen median tutkimusmenetelmät, pages 274–304. Vastapaino, Tampere, 2013.
15. Perttu Virtanen. Football Dataco v Sportradar - Toinen puoliaika ja kotikenttä tietokantojen valmistajalle. IPRinfo, 15(2):14–16, 2013.
16. Kazuho Watanabe, Teemu Roos, and Petri Myllymäki. Non-achievability of asymptotic minimax regret without knowledge of the sample size. In Proceedings of Information-Based Induction Sciences and Machine Learning (IBISML), 2013.

D.5. Computer programs and algorithms

1. Mehmet Gönen, Suleiman A. Khan, and Samuel Kaski. KBMF: Kernelized Bayesian matrix factorization. <http://research.ics.aalto.fi/mi/software/kbmf/>, 2013.
2. Arto Klami, Seppo Virtanen, and Samuel Kaski. CCAGFA: Bayesian canonical correlation analysis and group factor analysis. <http://cran.r-project.org/web/packages/CCAGFA/>, 2013.

D.6. Doctoral dissertations by a HIIT researcher

1. Antti Ajanki. Inference of relevance for proactive information retrieval. PhD thesis, Aalto University, School of Science, Espoo, Finland, 2013.
2. Lu Cheng. Bayesian methods in bacterial population genomics. PhD thesis, University of Helsinki, Department of Mathematics and Statistics, 2013.
3. Doris Entner. Causal Structure Learning and Effect Identification in Linear Non-Gaussian Models and Beyond. PhD thesis, University of Helsinki, Department of Computer Science, 2013.
4. Lauri Eronen. Computational Methods for Augmenting Associations-based Gene Mapping. PhD thesis, University of Helsinki, Department of Computer Science, 2013.
5. Esther Galbrun. Methods for Redescription Mining. PhD thesis, University of Helsinki, Department of Computer Science, 2013.
6. Mohammad Hoque. Towards Energy Efficient Multimedia Streaming to Mobile Devices. PhD thesis, Aalto University, School of Science, Espoo, 2013.
7. Antti Hyttinen. Discovering Causal Relations in the Presence of Latent Confounders. PhD thesis, University of Helsinki, Department of Computer Science, 2013.
8. Mikael Johnson. How Social Media Changes User-Centred Design - Cumulative and Strategic User Involvement with Respect to Developer-User Social Distance. PhD thesis, Aalto University, School of Science, Espoo, 2013.
9. Melih Kandemir. Learning Mental States from Biosignals. PhD thesis, Aalto University, School of Science, Espoo, Finland, 2013.
10. Jeffrey Lijffijt. Computational methods for comparison and exploration of event sequences. PhD thesis, Aalto University, School of Science, Espoo, Finland, 2013.
11. Boris Nechaev. Calibration and Analysis of Enterprise and Edge Network Measurements. PhD thesis, Aalto University, School of Science, Espoo, 2013.
12. Pin Nie. Multifaceted Optimization of Energy Efficiency for Stationary WSN Applications. PhD thesis, Aalto University, School of Science, 2013.
13. Mikko Pervilä. Data Center Retrofits. PhD thesis, University of Helsinki, Department of Computer Science, 2013.
14. Tatiana Polishchuk. Enabling Multipath and Multicast Data Transmission in Legacy and Future Internet. PhD thesis, University of Helsinki, Department of Computer Science, 2013.
15. Yrjö Raivio. Techno-Economic Analysis of Novel Opportunities for Mobile Networks - Open Innovation and Cloud Computing. PhD thesis, Aalto University, School of Science, 2013.
16. Mika Timonen. Term Weighting in Short Documents for Document Categorization, Keyword Extraction and Query Expansion. PhD thesis, University of Helsinki, Department of Computer Science, 2013.
17. Sami Vihavainen. Field Studies on User Experience of Automation in Context-Aware Social Media. PhD thesis, Faculty of Computing and Electrical Engineering, Tampere, 2013.
18. Johannes Wettig. Probabilistic, Information-Theoretic Models for Etymological Alignment. PhD thesis, University of Helsinki, Department of Computer Science, 2013.

D.7. Licentiate Theses by a HIIT researcher

1. Olli-Pekka Rinta-Koski. Monitoring sleep quality with non-invasive sensors. Licentiate of Science thesis, Department of Information and Computer Science, Aalto University, 2013.

D.8. Master's Theses by a HIIT researcher or instructed by a HIIT researcher

1. Tomi Aarnio. Near field communication using NFC to unlock doors. Master's thesis, Department of Computer Science and Engineering, Aalto University, 2013.
2. Intiaj Ahmed. Visualization and configurable manipulation of 3d appliance models on large screen considering kinect gestures. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
3. Amjad Alkodsí. Comparison of somatic copy number alteration detection algorithms in whole-genome and whole-exome data. Master's thesis, Department of Information and Computer Science, Aalto University, 2013.
4. Martti Anttila. Interactive constraint solving in a configurator. Master's thesis, Department of Information and Computer Science, Aalto University, 2013.
5. Christian Benner. Bayesian confirmatory factor analysis for detection of differential gene expression. Master's thesis, Department of Mathematics and Statistics, University of Helsinki, 2013.
6. Shichao Dong. Inter- and cross-protocol interference in IEEE 802.15.4 wireless sensor network data communications. Master's thesis, Department of Computer Science and Engineering, Aalto University, 2013.
7. Ridvan Dongelci. Energy efficient cloud computing: Energy efficiency of storage systems. Master's thesis, Department of Information and Computer Science, Aalto University, 2013.
8. Nick Eriksson. Utilizing publisher - subscriber pattern and multicasting in an interactive space environment. Master's thesis, Department of Computer Science and Engineering, Aalto University, 2013.
9. Zohaib Gulzar. The effects of dietary energy level during periparturient period on hepatic gene expressions in dairy cows. Master's thesis, Department of Information and Computer Science, Aalto University, 2013.
10. Jesse Haapoja. 'I want to see what others have found interesting': Online social filtering of news and magazine articles. Master's thesis, Department of Social Research, University of Helsinki, 2013.
11. Jyri-Petteri Huttunen. Asiantuntijaneuroverkköjen reaaliaikainen yhdistäminen neuroevoluutiomenetelmin. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
12. Mohammad S Islam. A practical comparison of de novo assemblers for RNA-seq. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
13. Apurva Jaiswal. Efficiency analysis of a non-trivial application ported into ICN paradigm. Master's thesis, Department of Computer Science and Engineering, Aalto University, 2013.
14. Tomi Johansson. 3GPP LTE release 9 and 10 requirements to physical layer testing. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
15. Juhana Kammonen. Improving the throughput of the forward population genetic simulation environment simuPOP. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
16. Nirmal Raman Kannaiyan. Identification of cell type-specific marker genes and pathways in the mouse brain. Master's thesis, Department of Information and Computer Science, Aalto University, 2013.
17. Riku Katainen. Detection of oncogenic variants from exome sequencing data. Master's thesis, Department of Computer Science, University of Helsinki, 2013.

18. Kritsada Katawutpoonphan. Binary sequencing for companion diagnostic. Master's thesis, Department of Information and Computer Science, Aalto University, 2013.
19. Janne Kauttio. MC/DC based test selection for dynamic symbolic execution. Master's thesis, Department of Information and Computer Science, Aalto University, 2013.
20. Henri Kesseli. Cloud enhanced embedded systems. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
21. Bhabuk Koirala. Dynamic modeling and control of the main metabolism in lactic acid bacteria. Master's thesis, Department of Information and Computer Science, Aalto University, 2013.
22. Ksenia Konyushkova. ImSe: Instant interactive image retrieval system with exploration/exploitation trade-off. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
23. Kalle-Ville Kosteila. Sovelluksen palvelunsaanti 3g-verkossa. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
24. Anna Kuosmanen. Comparison of RNA-seq data analysis software. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
25. Eemeli Leppäaho. Transfer learning with group factor analysis. Master's thesis, Department of Information and Computer Science, Aalto University, 2013.
26. Yonghao Li. Experimental study of home gateway characteristics and behavior. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
27. Youming Lin. Virtual networking for mobile cloud computing. Master's thesis, Department of Computer Science and Engineering, Aalto University, 2013.
28. Mika Majakorpi. Theory and practice of rapid elasticity in cloud applications. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
29. Markus Mettälä. Intelligent RSS tool. Master's thesis, Department of Information and Computer Science, Aalto University, 2013.
30. Mika Mielonen. HTML5-pohjainen sovelluskehitys ratkaisuna laitekannan pirstoutumiseen. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
31. Jussi Mäki. Distributed OpenFlow control-plane for mobile network gateways. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
32. Matti Niemenmaa. Analysing sequencing data in Hadoop: The road to interactivity via SQL. Master's thesis, Department of Information and Computer Science, Aalto University, 2013.
33. Lirim Osmani. Building scalable cloud infrastructures with OpenStack and GlusterFS. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
34. Ella Peltonen. An approach to machine learning with big data. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
35. Sami Remes. Extending group factor analysis to model events in MEG data. Master's thesis, Department of Information and Computer Science, Aalto University, 2013.
36. Tomi Ronimus. Detecting different types of botnets. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
37. Tommi Rönkönharju. Musiikin transkription ja harmonisen analyysin modernit tekoälyjärjestelmät. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
38. Olli Saarikivi. Test-guided proofs for C programs on LLVM. Master's thesis, Department of Information and Computer Science, Aalto University, 2013.

39. Samuli Sairanen. Botnet survey. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
40. Max Sandholm. Information retrieval perspective to interactive data visualization. Master's thesis, Department of Information and Computer Science, Aalto University, 2013.
41. Cenyu Shen. Energy profiling for Android. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
42. Xin Song. Measurement of Youtube data. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
43. Juho Stenudd. Automated test generation for real-time protocol software using model-based testing. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
44. Miraj Tafsir. Energy efficiency through virtual machine redistribution in telecommunication infrastructure nodes. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
45. Fitsum Tamene. Performance analysis of Gaussian graphical model methods for inferring biological networks from genomic data. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
46. Dung Vu Ba Tien. Design and performance evaluation of the H-box architecture interconnecting home multimedia devices. Master's thesis, Department of Computer Science and Engineering, Aalto University, 2013.
47. Timi Tuohenmaa. HLA:n suorituskyky reaaliaikaisessa simulaatiossa. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
48. Valtteri Vuorikoski. Jaettujen hajautustaulujen käyttö ja turvallisuusongelmat. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
49. Juha Vuorinen. Opportunistiset skedulointialgoritmit mobiileissa langattomissa järjestelmissä. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
50. Otto Waltari. Content-centric networking in the internet of things. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
51. Ziran Wang. Applying component models on theme-based news tracking and detection. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
52. Lilu Xu. WikiMage: a web game based on Wikipedia. Master's thesis, Department of Computer Science, University of Helsinki, 2013.
53. Wenqing Zhou. Music recommendation by exploiting users' listening history. Master's thesis, Department of Computer Science, University of Helsinki, 2013.

