SIKS report for Evaluation Committee

September 2015
FORM FOR MAIN PART OF ASSESSMENT OF SIKS

Year of submission
2015

Years in which accreditations were awarded

Name of research school (English)
The Netherlands Research School for Information and Knowledge Systems

Acronym / abbreviation
SIKS

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Institutes participating in the research school
-Vrije Universiteit Amsterdam ("administrative university")
-Utrecht University
-University of Twente
-University of Amsterdam
-Delft University of Technology
-Eindhoven University of Technology
-Radboud University
-Maastricht University
-Tilburg University
-Open Universiteit
-Centrum Wiskunde & Informatica
Research Evaluation SIKS

14 September 2015

1. Introduction and Mission

SIKS is the Netherlands Research School for Information and Knowledge Systems, founded in 1996 by researchers in the field of Artificial Intelligence, Databases & Information Systems and Software Engineering. It is a self-organized and self-financed network organization and was accredited by KNAW in 1998, 2003 and 2009. Currently, nearly 500 IKS researchers, including 250 PhD students cooperate in SIKS. Representing the vast majority of IKS researchers in the Netherlands, it provides these researchers with a platform for cooperation, information exchange and dissemination of knowledge. In SIKS these researchers shape a nationwide educational program in a way that cannot easily be achieved by local faculties or graduate schools. At present, SIKS brings together nearly 50 research groups from 11 universities in the Netherlands and from CWI (Centre for Mathematics and Computer Science), headed by over 50 full professors. In the period 2009-2014 no less than 287 SIKS PhD students have successfully defended their theses and published their work in the SIKS dissertation Series.

SIKS PhD students have different backgrounds and have been educated in divergent disciplines, varying from mainstream computer science and artificial intelligence to information science, business administration, the social sciences and the humanities (predominantly computational linguistics). This variety is reflected in the faculties and research groups participating in SIKS and is also mirrored in the nine research foci that SIKS has established for the next period of six years. The key distinguishing characteristic compared to ASCI1 and IPA2 (the two other research schools in the area of computer science) is that SIKS research not solely refers to computing machinery and technology, but inherently includes their use by and interaction with humans, social groups and organizations. It gives SIKS a distinct and well-recognized place in the area of computer science.

The mission of SIKS is to organize a high-quality PhD educational program for PhD students, using its nationwide network of research fellows, performing high-level fundamental and applied research in the IKS-field. In addition, SIKS stimulates and facilitates cooperation and communication between its members and alumni, as well as stakeholders interested in IKS research, such as other academic bodies or groups, leading companies in business and industry, research funding agencies and governmental organizations. As a KNAW-accredited network organization and as a founding member of IPN3, SIKS tries to influence the national research policy in the interest of the community of SIKS researchers.

2. Research context

SIKS currently concentrates on nine important focus areas in the IKS field, some of which

1 Advanced School for Computing and Imaging http://www.asci.tudelft.nl/
2 Institute for Programming research and Algorithmics http://www.win.tue.nl/ipa/
3 Informatics Platform Netherlands http://www.ictonderzoek.net/
have natural partial overlap. These focus areas have been established by senior research fellows of SIKS in a process of intensive and iterative consultations. Each focus area has a focus director, who can help the scientific and managing directors in finding the most suitable researchers for coordinating a course, seminar or conference in that area. A program committee monitors the evolution of the IKS research field through the years and may propose to create new focus areas or discontinue existing ones. The research foci for the upcoming period of six years are as follows:

1. Knowledge Representation and Reasoning (focus director: Prof. dr. F. Van Harmelen, VU)
2. Computational Intelligence (focus director: Prof. dr. E.O. Postma, TiU)
3. Agent Technology (focus director: Prof. dr. J.-J. Ch. Meyer, UU)
4. Computational Linguistics (focus director: Prof. dr. A. van den Bosch, RUN)
5. Web-based information systems (focus director: Prof. dr. G.-J. Houben, TUD)
6. Human Computer Interaction (focus director: Prof. dr. V. Evers, UT)
7. Data management, Storage and Retrieval (focus director: Dr. D. Hiemstra, UT)
8. Process mining / Business Process Management (focus director: Prof. dr. H. Reijers, VU)
9. Enterprise Information Systems (focus director: Prof. dr. R.J. Wieringa, UT)

The list of research foci is periodically reviewed and revised to adequately reflect the current state of the IKS research activities in the Netherlands. During the last review in 2015 research foci 4 and 8 were added.

Typically, all elements of the SIKS Activity Program, including courses, master classes, summer schools, seminars or conferences are related to these research foci. Also, all 50 research groups that are member of SIKS fit nicely into one or two of these focus areas. As a result of this clustering the backbone of the educational plan becomes apparent: in the next section it will be outlined how these nine themes are reflected in the activity program of SIKS.

An important aspect of the SIKS Research Context concerns cooperation. SIKS has strong ties with national and international organizations and programs in the IKS area and in neighboring fields. To exemplify this: SIKS cooperates with the Dutch Belgium Association for Artificial Intelligence (BNVKI) since 1998, among other things by co-organizing the yearly Dutch-Belgian Artificial Intelligence Conference (BNAIC). SIKS has a comparable long running cooperation with c.q. participates in the Belgium Netherlands Conference on Machine Learning (BENELEARN), the Dutch-Belgian DataBase Day (DBDBD), the Dutch-Belgian Information Retrieval Workshop (DIR), and Computational Linguistics in the Netherlands (CLIN). In 2006 SIKS founded the yearly Netherlands Belgium conference on Enterprise Information Systems (EIS) which is currently organized by SIKS in cooperation with the BENAIS, the Belgium-Netherlands Chapter of the AIS Society. In addition SIKS also has a successful cooperation with NIRICT through joint organization of the NIRICT-SIKS springschool on Human Computer Interaction. Furthermore, SIKS is associated with the NWO program on Language in Interaction, it contributes to the “ICT with Industry” workshop(s) at
the Lorentz Center and organizes yearly a track in the national ICT.OPEN conference. In 2016 SIKS will be the chair of the national ICT.OPEN conference.

Due to the cooperation with the aforementioned organizations SIKS members can participate for free in conferences like DBDBD, BENELEARN, DIR and EIS. SIKS also has a long running cooperation with the AAMAS, the European Summer school on Multi Agent systems, thus enabling SIKS PhD students to participate for free. Since 2005 SIKS also cooperates with the top conferences that are organized in the Netherlands, such as EASSS, SIGIR, CAiSE, and (next year) IJCAI, allowing the SIKS PhD students to participate in tutorial programs, workshops of doctoral consortia for free. The Scientific Director of SIKS, Prof. dr. P. De Bra (TUE) represents SIKS in several national gremia.

Finally, internal communication and cooperation is stimulated by organizing annual SIKS-days (traditionally in Utrecht) or SIKS meetings at ICT Open and, even more importantly, by inviting all members at the (educational) activities. On average SIKS (co-) organizes or (co-) finances around 25 activities per year that are mainly aimed at PhD students, but by inviting all research-fellows and also frequently alumni, SIKS aims at bringing together the senior staff to foster networking and research collaboration.

3. Education Context

3.1. Aim of the program

The main aim of the SIKS Educational Program is to offer PhD students a nation-wide teaching program in the field of Information and Knowledge Systems during the course of their PhD study, that will provide them with broad basic knowledge as well as specialized, advanced training. SIKS-alumni will be high-quality researchers, possessing a thorough knowledge of the School's field of research, and specialized in the subject of their dissertation. They will be able to carry out fundamental research as well as put their knowledge to practical use. As a result, SIKS-alumni can be expected to enter the labor market in a favorable position, whether they continue their career in academic research, industrial research or consultancy.

To achieve these objectives SIKS shapes a four-year program by (co-)organizing and (co-) financing such divergent activities as courses, master classes, seminars, research colloquia, doctoral consortia and lectures/tutorials given by visiting professors from abroad or senior staff members. For the most part SIKS realizes these training activities by utilizing its nation-wide expertise. Increasingly, the training program of SIKS has gained an international character. This has been achieved for instance by inviting top speakers from abroad at advanced courses and by arranging a free admission of SIKS PhD students to accredited international summer schools, or to tutorial programs and doctoral consortia of accredited international conferences.

The courses developed by SIKS itself have a twofold aim:

1. to provide the PhD student with a basic methodological training and to supplement the Masters courses the PhD student has followed;
2. to bring the PhD student into contact with the international forefront of research topics, addressed by the student in his PhD project.
3.2. Revision of the curriculum

In the period 2009-2014 SIKS made a distinction between a Tutorial Program (based on the previous Basic Course Program) and Advanced Courses, which are at the heart of the Advanced Activities Program. Board and Scientific Advisory Committee decided to drop this distinction. As of 2016 SIKS will organize its course program along two dimensions:

1. Courses with a broad focus versus courses on a more specialized topic. Courses with a broad scope are typically aimed at the entire population of 250 SIKS PhD students; courses with a narrow focus may be aimed at a small niche.

2. Courses that are offered on a regular basis with a fixed periodicity versus courses which are organized depending on new trends in the field, identified by the SIKS Program Committee, or upon request. In fact, they could be organized only once, or evolve into a regular course.

For example, the SIKS course on Research Methods and Methodology for IKS is organized each year and is strongly recommended to all SIKS PhD students. The tutorial takes three days and intends to cater for the observation of many supervisors that students often lack an adequate methodological background for doing research. It is a broad course that covers such divergent topics as philosophy of computer science, research planning, problem analysis, case studies as a research design, empirical validation techniques and qualitative research. The following courses have been successfully organized in the past period of six years as Basic courses / Tutorials and are now being transformed along the newly established criteria.

Research methods and methodology for IKS (2 ECTS)
This course is strongly recommended for all students and is organized each year. It fills in the gap left by the lack of attention to research methods for IKS in current Dutch (and foreign) Master curricula. It is not a general research methods course, but tackles methodological issues specifically in the context of computer science and information systems development and more in general the engineering of information and knowledge systems.
Course directors: Dr. H. Weigand (TiU), Prof.dr. R.J. Wieringa (UT), Prof.dr. J.-J.Ch. Meyer (UU), Dr. R. Starmans (UU), Prof.dr. J.M. Akkermans (VUA).

Learning and reasoning (1 ECTS)
Mix of symbolic and subsymbolic techniques from an AI perspective by consistent application of the “learning and reasoning” metaphor: Probabilistic reasoning / Introduction Bayesian networks, introduction machine learning, reinforcement learning, learning and reasoning for information access, qualitative reasoning, argumentation systems, model based reasoning.
Course directors: Dr. A. Ten Teije (VUA), Dr. G.A.W. Vreeswijk (UU), Dr. P. Groot (RUN)

Agent technology (1 ECTS)
For the main part based on symbolic AI. Introduction multi-agent systems: agent logics, agent theories, agent architectures, agent programming, norms/ institutions/deontic logic,
planning, coordination, conflict resolution in MAS, negotiation, mechanism design and auctions.
Course directors: Prof.dr. J.-J.Ch. Meyer (UU), Prof.dr. C. Jonker (TUD), Prof.dr. C. Witteveen (TUD), Dr. F. Dignum (UU)

Mathematical methods for IKS (1 ECTS)
Information theory, probability, Bayesian learning, statistical techniques for IKS.
Course directors: Prof.dr. E.O. Postma (TiU), Prof. dr. T. Heskes (RUN)

Information retrieval (1 ECTS)
Capita Selecta IR (formalisms, models), probabilistic models for IR, multi-media retrieval, empirical methods for IR, multi-media retrieval, XML retrieval, web mining en web retrieval, automatic query improvement.
Course directors: Prof.dr.ir Th. van der Weide (RUN), Dr. D. Hiemstra (UT), Prof. dr. Wessel Kraaij (RUN)

Interactive systems (1 ECTS)
Human computer interaction, Hypermedia, Adaptive hypermedia, Intelligent multimedia, Web-based information systems.
Course directors: Prof.dr. P. De Bra (TU/e), Prof.dr. V. Evers (UT), Prof.dr. G. van der Veer (VUA/OU)

Fundamentals of Data Science (1 ECTS)
Data Science is "the study of the generalizable extraction of knowledge from data" (source: Wikipedia). In the IKS context the data is often (enterprise) business data, web log data or open data. The different topics are mostly introduced with this context in mind.
Course directors: Prof.dr. P. De Bra (TU/e), Dr. H. Weigand (TiU)

Until now the Advanced courses have not always been organized on a regular basis and they showed a wider variety of topics. The following anthology lists successful advanced courses:

03-04 Nov 2014 Advanced SIKS-course "Contemporary AI for Serious Gaming", Vught
26-27 Nov 2013 Advanced SIKS/SURFsara Course on Big Data, Enschede
27-30 Aug 2013 Advanced Course on Data Mining, Maastricht
17-18 June 2013 Advanced SIKS Course: “AI for Games”, Tilburg
23-24 May 2013 Advanced SIKS Course: “Computational Intelligence”, Driebergen
22-23 April 2013 Advanced SIKS-Course "Come Let's play: From Modeling with Statecharts to Behavioral Programming & Process Mining", Eindhoven
02-03 Oct 2012 Advanced SIKS-Course: “Principles of Intelligent Organization”, Groesbeek
12-13 April 2012 Advanced SIKS Course on Computer Supported Learning, Vught
Some of these courses are now being restyled and organized along the newly established criteria. Although we expect the restyled program to fully start in the spring of 2016, SIKS has already started to organize courses along the new lines in 2015:

18-19 June 2015    SIKS-course: “Advances in Information Retrieval”
11-13 Nov 2015     SIKS-course: “Research Methods and Methodology for IKS”
14-15 Dec 2015     SIKS-course: “Foundations of Data Science: Data & Process Mining”

Typically, course directors are senior research fellows of SIKS, appointed by the Board of Governors, after nomination by the Scientific Director.

SIKS demands an active participation from all PhD students that have entered the school. Especially courses related to the focus area on which a PhD student works are strongly recommended to the researchers involved. Upon request certificates are provided. For an annual fee of EUR 700 each SIKS Phd student has full access to all elements of the program. With respect to courses organized by SIKS in a conference center, this includes an in-house stay with single rooms for each student, all meals and course material for free. SIKS deliberately takes these considerable financial and managerial efforts to strengthen the social aspect of doing PhD research and building up a research community.

The final responsibility for each graduation remains with the university where the defense takes place. SIKS has its own policy with respect to quality control. The scientific director of SIKS is responsible for the (scientific) quality of the teaching program. The managing director is responsible for the organization of the program. Each student entering the school has to provide SIKS with a detailed supervision and teaching program. In addition SIKS demands the promotor or at least the co-promotor and daily supervisor to be senior research fellows of SIKS. Furthermore, SIKS expects a so called co-supervisor to be added to the reading committee. The co-supervisor should be a SIKS staff member who is not employed at the same university where the promotion takes place.

3.3 Relation between SIKS and local graduate schools
To prepare for the current SEP Evaluation the Scientific Directors, Board members and management teams of SIKS, IPA and ASCI had an intensive meeting in Utrecht in February 2015. One agenda item concerned the current and future relation between federative research schools and local graduate schools. We share the view that the relationship between the local graduate schools and federated research schools are clear and the mutual tasks seem well defined.

Training on topics of the research field (IKS in the case of SIKS) is organized by the research schools. Training of general skills such as Scientific Writing, Presentation, and Research Integrity, is organized by the participating university itself. The programs of the research schools should be arranged so that the activities fit within the training and supervision plan used by the universities themselves. An important point is that graduate schools in the Netherlands vary considerably. Sometimes there is more than one graduate school per
faculty, sometimes there is one graduate school for the entire university. Many SIKS PhD students are only formally registered at a graduate school. This has not caused any conflict between research schools and graduate schools. Some universities do permit their PhD students to take regular local master courses as part of their training, whereas at other universities this is explicitly prohibited. Especially by organizing activities at a level higher than that of master courses and by making use of the nationwide expertise within a school, a research school like SIKS can demonstrate its value. The final quality control of the individual PhD student lies with the universities (or the graduate schools), as it has actually always been the case. These assemble the doctoral committee and the thesis is approved by the university. The research schools ensure that they are adequately represented in the promotion committees. PhD students from ASCI, IPA and SIKS publish their theses in the thesis series of the respective schools.

3.4 Relation with ASCI and IPA
At the meeting in Utrecht SIKS, IPA and ASCI have also considered their mutual relation and the question whether reprofiling or harmonizing the mutual programs was necessary. It was then established that there is no reason for reprofiling or harmonization of the mutual programs. There appears to be little overlap between the schools, though of course there are always issues at the interface. SIKS courses are regularly attended by students from other schools (for example, BETA, ERIM, TRAIL), but attendance by PhD students from ASCI and IPA is limited. Currently, we do not have figures about SIKS PhD students attending courses of ASCI and IPA or other research schools. We do know that SIKS students rarely have co-supervisors who are members of ASCI and IPA. There are no real organizational or financial barriers for students to participate in courses from other schools. Courses organized by SIKS in a conference centre (including all meals and overnight stay in a single room) are more expensive than activities organized on campus (as is done more by other schools). But there are no financial barriers for IPA and/or ASCI students for attending SIKS courses, as we have a standard financial arrangement for such cases.

4. Education in Bachelor’s and Master’s Phase
As indicated above, SIKS primarily aims at PhD students. They are registered and pay an annual fee. However, external visitors are never excluded and this obviously applies to master students as well. Until now, master students have only rarely attended SIKS courses. One reason for this is that many courses demand a level of maturity that is beyond the level and capabilities of a typical master student. Another reason concerns the format of the SIKS courses and the requirements for examination or graduation.

5. Career Prospects for Alumni
Despite the economical crisis unemployment amongst SIKS-alumni is virtually non-existent; and this situation prevails for many years now. Many of our graduates have already accepted a new position long before the public defense of their thesis. SIKS carefully monitors their prospects and career moves. It appears that about 30% of our students re-enter the School, but now as a research fellow. Many of them have become lecturers and even course
directors in SIKS educational program themselves. In fact, they often appear to be the best ambassadors of the Program. About 10% also becomes employed as a researcher at a university in or outside the Netherlands, but is no longer involved in SIKS. Furthermore, about 10% performs research in a non-academic research centre (Philips, TNO, Yahoo Research, Google, to name a few). Without a doubt the latter development is becoming a trend, especially in research areas such as Information Retrieval. About 45% works as a consultant, in industry (mostly) or in governmental organizations. As far as we have managed to trace less than 5% does not succeed in finding a suitable position.

6. Graduation Rate

<table>
<thead>
<tr>
<th>year</th>
<th>enrolled</th>
<th>≤4 year</th>
<th>≤5 year</th>
<th>≤6 year</th>
<th>≤7 year</th>
<th>total</th>
<th>underway</th>
<th>dropout</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>60</td>
<td>23</td>
<td>48</td>
<td>49</td>
<td>49</td>
<td>52</td>
<td>1</td>
<td>7</td>
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<tr>
<td></td>
<td></td>
<td>38%</td>
<td>80%</td>
<td>82%</td>
<td>82%</td>
<td>87%</td>
<td>2%</td>
<td>11%</td>
</tr>
<tr>
<td>2007</td>
<td>49</td>
<td>14</td>
<td>31</td>
<td>42</td>
<td>43</td>
<td>43</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>29%</td>
<td>63%</td>
<td>86%</td>
<td>87%</td>
<td>87%</td>
<td>0%</td>
<td>13%</td>
</tr>
<tr>
<td>2008</td>
<td>52</td>
<td>14</td>
<td>27</td>
<td>45</td>
<td>45</td>
<td>46</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>26%</td>
<td>52%</td>
<td>86%</td>
<td>86%</td>
<td>88%</td>
<td>4%</td>
<td>8%</td>
</tr>
<tr>
<td>2009</td>
<td>68</td>
<td>9</td>
<td>36</td>
<td>49</td>
<td>51</td>
<td>51</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13%</td>
<td>53%</td>
<td>72%</td>
<td>75%</td>
<td>75%</td>
<td>19%</td>
<td>6%</td>
</tr>
<tr>
<td>2010</td>
<td>48</td>
<td>16</td>
<td>27</td>
<td>27</td>
<td>27</td>
<td>27</td>
<td>19</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>34%</td>
<td>56%</td>
<td>56%</td>
<td>56%</td>
<td>56%</td>
<td>40%</td>
<td>4%</td>
</tr>
<tr>
<td>2011</td>
<td>64</td>
<td>11</td>
<td>31</td>
<td>31</td>
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<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17%</td>
<td>48%</td>
<td>48%</td>
<td>48%</td>
<td>48%</td>
<td>47%</td>
<td>5%</td>
</tr>
</tbody>
</table>

7. The Measures Taken in Response to Criticism Made at the Time of the Previous Reaccreditation

At the time of the previous Reaccreditation ECOS of KNAW advised SIKS to pay attention and monitor developments in the local graduate schools and to cooperate with other research schools to meet requirements made by these new entities. In Section 3.3. and section 3.4 we have outlined the current relations with both the graduate schools and federative research schools and shown that the demarcations are clear.

8. Male/Female Ratio among the Members of the Permanent Staff, the Post-docs and PhD Students in the Research School

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent staff</td>
<td>212</td>
<td>173 (81%)</td>
<td>39 (19%)</td>
</tr>
<tr>
<td>Post-docs</td>
<td>43</td>
<td>34 (79%)</td>
<td>9 (21%)</td>
</tr>
<tr>
<td>PhD students</td>
<td>243</td>
<td>183 (75%)</td>
<td>60 (25%)</td>
</tr>
</tbody>
</table>
9. **Organization and Management**

The main organizational change in SIKS during the current accreditation period concerns the appointment of a new Scientific Director. On 1 September 2011 Prof.dr. Paul De Bra was appointed by the SIKS Board of Governors as Scientific Director of SIKS. He took over this position from Prof.dr. Roel Wieringa, who was Scientific Director from 1 September 2006 until 1 September 2011.

Also in the Board of Governors changes have taken place. In September 2011 Prof.dr. Wil van der Aalst became Board member, representing Eindhoven University of Technology. He took over the position of Prof.dr. Paul De Bra. In March 2013 Prof.dr. Marcus Specht became Board member, representing the Open University. He took over the position of Prof.dr. Peter Sloep. In February 2015 Prof.dr. Guus Schreiber from the Vrije Universiteit Amsterdam became chairman of the Board. He took over the position from Prof.dr. Hans Akkermans, who was chairman of the Board from 1 January 2003 until 1 February 2015.

10. **Financial Resources**

Unlike ASCI and IPA SIKS is entirely self-financed. It currently receives no subsidy from its administrative university, de Vrije Universiteit. The annual budget depends on the number of research fellows and PhD students entering the school and varies between EUR 170,000 and EUR 200,000 yearly. However, through careful financial management SIKS has obtained a sound financial position and has built up a financial reserve of about EUR 200,000. The SIKS expenses consist for the main part of the costs for running the SIKS office and organizing the activity program. To cater for eventual financial fluctuations that characterize the current Dutch academic situation, the board of governors has decided to keep a financial reserve of about EUR 200,000 about the size of the average budget.

11. **Appendix: list of graduated students**
### 2009

**2009-01**
Rasa Jurgelenaite (RUN)  
**Symmetric Causal Independence Models**  
Promotor: Prof. dr. T.M. Heskes (RUN)  
*Promotion: 19 January 2009*

**2009-02**  
Willem Robert van Hage (VU)  
**Evaluating Ontology-Alignment Techniques**  
Promotor: Prof. dr. G. Schreiber (VU)  
*Promotion: 19 January 2009*

**2009-03**  
Hans Stol (UvT)  
**A Framework for Evidence-based Policy Making using IT**  
Promotor: Prof. dr. H.J. van den Herik (UvT)  
*Promotion: 21 January 2009*

**2009-04**  
Josephine Nabukenya (RUN)  
**Improving the Quality of Organisational Policy Making using Collaboration Engineering**  
Promotores: Prof. dr. E. Proper (RUN), Prof. dr. ir. G.-J. de Vreede, University of Nebraska at Omaha, USA  
Copromotor: Dr. P. van Bommel (RUN)  
*Promotion: 03 March 2009*

**2009-05**  
Sietse Overbeek (RUN)  
**Bridging Supply and Demand for Knowledge Intensive Tasks - Based on Knowledge, Cognition, and Quality**  
Promotor: Prof. dr. E. Proper (RUN)  
*Promotion: 24 April 2009*

**2009-06**  
Muhammad Subianto (UU)  
**Understanding Classification**  
Promotor: Prof. dr. A.P.J.M. Siebes (UU)  
*Promotion: 14 January 2009*

**2009-07**  
Ronald Poppe (UT)  
**Discriminative Vision-Based Recovery and Recognition of Human Motion**  
Promotor: Prof. dr. ir. A. Nijholt (UT)  
Copromotor: Dr. M. Poel (UT)  
*Promotion: 02 April 2009*

**2009-08**  
Volker Nannen (VU)  
**Evolutionary Agent-Based Policy Analysis in Dynamic Environments**  
Promotores: Prof. dr. J. van den Bergh (VU), Prof. dr. A.E. Eiben (VU)  
*Promotion: 16 April 2009*

**2009-09**  
Benjamin Kanagwa (RUN)  
**Design, Discovery and Construction of Service-oriented Systems**  
Promotor: Prof. dr. ir. Th. van der Weide (RUN)  
*Promotion: 21 April 2009*

**2009-10**  
Jan Wielemaker (UvA)  
**Logic programming for knowledge-intensive interactive applications**  
Promotores: Prof. dr. B.J. Wielinga (UvA), Prof. dr. A.Th. Schreiber (VU)  
*Promotion: 12 June 2009*

**2009-11**  
Alexander Boer (UvA)  
**Legal Theory, Sources of Law & the Semantic Web**  
Promotor: Prof. dr. T. M. van Engers (UvA)  
Copromotores: Prof. dr. J. A. P. J. Breuker (UvA), Dr. R. G. F. Winkels (UvA)  
*Promotion: 25 June 2009*

**2009-12**  
Peter Massuthe (TU/e, Humboldt-Universität zu Berlin)  
**Operating Guidelines for Services**  
Promotores: Prof. dr. K. van Hee (TU/e), Prof. dr. W. Reisig (Humboldt-Universität zu Berlin)  
Copromotor: Prof. dr. K. Wolf (Universität Rostock)  
*Promotion: 21 April 2009*

**2009-13**  
Steven de Jong (UM)  
**Fairness in Multi-Agent Systems**  
Promotor: Prof. dr. H.J. van den Herik (UvT), Prof. dr. E.O. Postma (UvT)  
Copromotor: Dr. K. Tuyls (TU/e)  
*Promotion: 04 June 2009*

**2009-14**  
Maksym Korotkiy (VU)  
**From ontology-enabled services to service-enabled ontologies (making ontologies work in e-science with ONTO-SOA)**  
Promotores: Prof. dr. J. Top (VU)  
*Promotion: 18 June 2009*

**2009-15**  
Rinke Hoekstra (UvA)  
**Ontology Representation - Design Patterns and Ontologies that Make Sense**  
Promotor: Prof. dr. J.A.P.J. Breuker (UvA)  
Copromotores: Prof. dr. T.M. van Engers (UvA), Dr. R.G.F. Winkels (UvA)  
*Promotion: 18 September 2009*
2009-16
Fritz Reul (UvT)
**New Architectures in Computer Chess**
Promotor: Prof. dr. H.J. van den Herik (UvT)
Copromotor: Dr. J.W.H.M. Uiterwijk (UM)
*Promotion: 17 June 2009*

2009-17
Laurens van der Maaten (UvT)
**Feature Extraction from Visual Data**
Promotores: Prof. dr. E.O. Postma (UvT), Prof. dr. H.J. van den Herik (UvT)
Copromotor: Dr. A.G. Lange (RACM)
*Promotion: 23 June 2009*

2009-18
Fabian Groffen (CWI)
**Armada, An Evolving Database System**
Promotor: Prof. dr. M.L. Kersten (CWI/UvA)
Copromotor: Dr. S. Manegold (CWI)
*Promotion: 10 June 2009*

2009-19
Valentin Robu (CWI)
**Modeling Preferences, Strategic Reasoning and Collaboration in Agent-Mediated Electronic Markets**
Promotor: Prof. dr. H. La Poutre (CWI/TUE)
*Promotion: 02 July 2009*

2009-20
Bob van der Vecht (UU)
**Adjustable Autonomy: Controlling Influences on Decision Making**
Promotor: Prof. dr. J.-J. Ch. Meyer (UU)
Copromotor: Dr. F. Dignum (UU)
*Promotion: 06 July 2009*

2009-21
Stijn Vanderlooy (UM)
**Ranking and Reliable Classification**
Promotor: Prof. dr. H.J. van den Herik (UvT), Prof. dr. Th.A. de Roos (UM), Prof. dr rer. nat. E. Hüllemeier, Philipps-University of Marburg, Germany
*Promotion: 01 July 2009*

2009-22
Pavel Serdyukov (UT)
**Search For Expertise: Going beyond direct evidence**
Promotor: Prof. dr. P.M.G. Apers (UT)
Copromotor: Dr. D. Hiemstra (UT)
*Promotion: 24 June 2009*

2009-23
Peter Hofgesang (VU)
**Modelling Web Usage in a Changing Environment**
Promotor: Prof. dr. A.E. Eiben (VU)
*Promotion: 08 October 2009*

2009-24
Annerieke Heuvelink (VU)
**Cognitive Models for Training Simulations**
Promotor: Prof. dr. J. Treur (VU)
*Promotion: 11 September 2009*

2009-25
Alex van Ballegooij (CWI)
**"RAM: Array Database Management through Relational Mapping"**
Promotor: Prof. dr. M.L. Kersten (CWI/UvA)
*Promotion: 17 September 2009*

2009-26
Fernando Koch (UU)
**An Agent-Based Model for the Development of Intelligent Mobile Services**
Promotores: Prof. dr. J.-J. Ch. Meyer (UU), Prof. dr. E. Sonenberg (University of Melbourne)
Copromotor: Dr. F. Dignum (UU)
*Promotion: 05 October 2009*

2009-27
Christian Glahn (OU)
**Contextual Support of social Engagement and Reflection on the Web**
Promotores: Prof. dr. E.J.R. Koper (OU), Prof. dr. M. Specht (OU)
*Promotion: 18 September 2009*

2009-28
Sander Evers (UT)
**Sensor Data Management with Probabilistic Models**
Promotores: Prof. dr. ir. P.M.G. Apers (UT)
Copromotor: Prof. dr. L. Feng, Tsinghua University (China)
*Promotion: 25 September 2009*

2009-29
Stanislav Pokraev (UT)
**Model-Driven Semantic Integration of Service-Oriented Applications**
Promotor: Prof. dr. ir. R. J. Wieringa (UT)
Co-promotor: Prof. dr. M. Reichert (University of Ulm)
Assistant promotor: Dr. ir. M. W. A. Steen (Novay)
*Promotion: 22 October 2009*
2009-30
Marcin Zukowski (CWI)
Balancing vectorized query execution with bandwidth-optimized storage
Promotor: Prof. dr. M.L. Kersten (CWI/UvA)
Copromotor: Dr. P.A. Boncz (CWI)
Promotion: 11 September 2009

2009-31
Sofiya Katrenko (UvA)
A Closer Look at Learning Relations from Text
Promotor: Prof. dr. P.W. Adriaans (UvA)
Promotion: 10 September 2009

2009-32
Rik Farenhorst (VU) and Remco de Boer (VU)
Architectural Knowledge Management: Supporting Architects and Auditors
Promotor: Prof. dr. J.C. van Vliet (VU)
Copromotor: Dr. P. Lago (VU)
Promotion: 05 October 2009

2009-33
Khiet Truong (UT)
How Does Real Affect Affect Affect Recognition In Speech?
Promotor: Prof. dr. F.M.G. de Jong (UT), Prof. dr. ir. D.A. van Leeuwen (RU)
Promotion: 27 August 2009

2009-34
Inge van de Weerd (UU)
Advancing in Software Product Management: An Incremental Method Engineering Approach
Promotor: Prof. dr. S. Brinkkemper (UU)
Copromotor: Dr. ir. J. Versendaal (UU)
Promotion: 09 September 2009

2009-35
Wouter Koelewijn (UL)
Privacy en Politiegegevens; Over geautomatiseerde normatieve informatie-uitwisseling
Promotores: Prof. dr. H.J. van den Herik (UvT/UL), Prof. mr. A.H.J. Schmidt (UL)
Co-promotor: Dr. L. Mommers (UL)
Promotion: 04 November 2009

2009-36
Marco Kalz (OU)
Placement Support for Learners in Learning Networks
Promotor: Prof. dr. E.J.R. Koper (OU)
Copromotor: Dr. J.M. van Bruggen (OU)
Promotion: 16 October 2009

2009-37
Hendrik Drachsler (OU)
Navigation Support for Learners in Informal Learning Networks
Promotores: Prof. dr. E.J.R. Koper (OU)
Co-promotor: Dr. H.G.K. Hummel (OU)
Promotion: 16 October 2009

2009-38
Riina Vuorikari (OU)
Tags and self-organisation: a metadata ecology for learning resources in a multilingual context
Promotor: Prof. dr. E.J.R. Koper (OU)
Promotion: 13 November 2009

2009-39
Christian Stahl (TUE, Humboldt-Universität zu Berlin)
Service Substitution -- A Behavioral Approach Based on Petri Nets
Promotores: Prof. dr. K. van Hee (TU/e), Prof. dr. W. Reisig (Humboldt-Universität zu Berlin)
Co-promotor: Prof. dr. K. Wolf (Universität Rostock)
Promotion: 1 December 2009

2009-40
Stephan Raaijmakers (UvT)
Multinomial Language Learning: Investigations into the Geometry of Language
Promotores: Prof. dr. W. Daelemans (UvT), Prof. dr. A.P.J. van den Bosch (UvT)
Promotion: 1 December 2009

2009-41
Igor Berezhnyy (UvT)
Digital Analysis of Paintings
Promotor: Prof. dr. E.O. Postma (UvT), Prof. dr. H.J. van den Herik (UvT)
Promotion: 7 December 2009

2009-42
Toine Bogers (UvT)
Recommender Systems for Social Bookmarking
Promotor: Prof. dr. A.P.J. van den Bosch (UvT)
Promotion: 8 December 2009

2009-43
Virginia Nunes Leal Franqueira (UT)
Finding Multi-step Attacks in Computer Networks using Heuristic Search and Mobile Ambients
Promotor: Prof. dr. R.J. Wieringa (UT)
Co-promotor: Dr. P. van Eck (UT)
Promotion: 13 November 2009
Appendix: SIKS Dissertations 2009-2014

2009-44
Roberto Santana Tapia (UT)
Assessing Business-IT Alignment in Networked Organizations
Promotor: Prof. dr. R.J. Wieringa (UT)
Promotion: 4 December 2009

2009-45
Jilles Vreeken (UU)
Making Pattern Mining Useful
Promotor: Prof. dr. A.P.J.M. Siebes (UU)
Promotion: 15 December 2009

2009-46
Loredana Afanasiev (UvA)
Querying XML: Benchmarks and Recursion
Promotor: Prof. dr. M. de Rijke (UvA)
Co-promotor: Dr. M.J. Marx (UvA)
Promotion: 18 December 2009

2010

2010-01
Matthijs van Leeuwen (UU)
Patterns that Matter
Promotor: Prof. dr. A.P.J.M. Siebes (UU)
Promotion: 09 February 2010

2010-02
Ingo Wassink (UT)
Work flows in Life Science
Promotor: Prof. dr. ir. A. Nijholt (UT), Prof. dr. G.C. van der Veer (OU)
Copromotor: Dr. P. van der Vet (UT)
Promotion: 14 January 2010

2010-03
Joost Geurts (CWI)
A Document Engineering Model and Processing Framework for Multimedia documents
Promotor: Prof. dr. L. Hardman (CWI/TUE)
Copromotor: Dr. J. van Ossenbruggen (CWI)
Promotion: 03 February 2010

2010-04
Olga Kulyk (UT)
Do You Know What I Know? Situational Awareness of Co-located Teams in Multidisplay Environments
Promotor: Prof. dr. ir. A. Nijholt (UT), Prof. dr. G.C. van der Veer (OU)
Copromotor: Dr. E. M. A. G. van Dijk (UT)
Promotion: 14 January 2010

2010-05
Claudia Hauff (UT)
Predicting the Effectiveness of Queries and Retrieval Systems
Promotor: Prof. dr. F.M.G. de Jong (UT)
Copromotor: Dr. ir. D. Hiemstra (UT)
Promotion: 29 January 2010

2010-06
Sander Bakkes (UvT)
Rapid Adaptation of Video Game AI
Promotor: Prof. dr. H.J. van den Herik (UvT)
Copromotor: Dr. ir. H. M. Spronck (UvT)
Promotion: 03 March 2010

2010-07
Wim Fikkert (UT)
Gesture interaction at a Distance
Promotor: Prof. dr. ir. A. Nijholt (UT), Prof. dr. G.C. van der Veer (OU)
Copromotor: Dr. P. van der Vet (UT)
Promotion: 11 March 2010

2010-08
Krzysztof Siewicz (UL)
Towards an Improved Regulatory Framework of Free Software. Protecting user freedoms in a world of software communities and eGovernments
Promotores: Prof. dr. H.J. van den Herik (UvT/UL), Prof. mr. A.H.J. Schmidt (UL)
Promotion: 20 April 2010

2010-09
Hugo Kielman (UL)
Politiegegevensverwerking en Privacy, Naar een effectieve waarborging
Promotores: Prof. dr. H.J. van den Herik (UvT/UL), Prof. mr. A.H.J. Schmidt (UL)
Promotion: 14 April 2010

2010-10
Rebecca Ong (UL)
Mobile Communication and Protection of Children
Promotor: Prof. dr. H.J. van den Herik (UvT/UL)
Copromotor: Mr. dr. L. Mommers (UL)
Promotion: 14 April 2010

2010-11
Adriaan Ter Mors (TUD)
The world according to MARP: Multi-Agent Route Planning
Promotor: Prof. dr. C. Witteveen (TUD)
Copromotor: Dr. ir. F. A. Kuipers (TUD)
Promotion: 15 March 2010
Appendix: SIKS Dissertations 2009-2014

2010-12
Susan van den Braak (UU)
**Sensemaking software for crime analysis**
Promotor: Prof. dr. J.-J.Ch. Meyer (UU), Prof. dr. mr. H. Prakken (UU / RUG)
Copromotor: Dr. H. van Oostendorp (UU), Dr. G.A.W. Vreeswijk (UU)
*Promotion: 15 March 2010*

2010-13
Gianluigi Folino (RUN)
**High Performance Data Mining using Bio-inspired techniques**
Promotor: Prof. dr. T.M. Heskes (RUN)
Copromotor: Dr. E. Marchiori (RUN)
*Promotion: 22 March 2010*

2010-14
Sander van Splunter (VU)
**Automated Web Service Reconfiguration**
Promotor: Prof. dr. F. M.T. Brazier (TUD)
Copromotor: Dr. P.H.G. van Langen (TUD)
*Promotion: 29 March 2010*

2010-15
Lianne Bodenstaff (UT)
**Managing Dependency Relations in Inter-Organizational Models**
Promotor: Prof. dr. R.J. Wieringa (UT), Prof. dr. M. Reichert (University of Ulm)
*Promotion: 17 June 2010*

2010-16
Sicco Verwer (TUD)
**Efficient Identification of Timed Automata, theory and practice**
Promotor: Prof. dr. C. Witteveen (TUD)
Copromotor: Dr. M. de Weerdt (TUD)
*Promotion: 02 March 2010*

2010-17
Spyros Kotoulas (VU)
**Scalable Discovery of Networked Resources: Algorithms, Infrastructure, Applications**
Promotor: Prof. dr. F. van Harmelen (VU)
Copromotor: Dr. R. Siebes (VU)
*Promotion: 24 March 2010*

2010-18
Charlotte Gerritsen (VU)
**Caught in the Act: Investigating Crime by Agent-Based Simulation**
Promotor: Prof. dr. J. Treur (VU)
Copromotor: Dr. M.C.A. Klein (VU)
*Promotion: 12 April 2010*

2010-19
Henriette Cramer (UvA)
**People's Responses to Autonomous and Adaptive Systems**
Promotor: Prof. dr. B.J. Wielinga (UvA)
Copromotor: Dr. V. Evers (UvA)
*Promotion: 23 April 2010*

2010-20
Ivo Swartjes (UT)
**Whose Story Is It Anyway? How Improv Informs Agency and Authorship of Emergent Narrative**
Promotor: Prof. dr. ir. A. Nijholt (UT)
Copromotor: Dr. M. Theune (UT)
*Promotion: 19 May 2010*

2010-21
Harold van Heerde (UT)
**Privacy-aware data management by means of data degradation**
Promotor: Prof. dr. P.G.M. Apers (UT), Prof. dr. P. Pucheral (University of Versailles Saint-Quentin)
Copromotor: Dr. M. Fokkinga (UT)
*Promotion: 04 June 2010*

2010-22
Michiel Hildebrand (CWI)
**End-user Support for Access to Heterogeneous Linked Data**
Promotores: Prof. dr. L. Hardman (CWI) and Prof. dr. A.Th. Schreiber (VU)
Copromotor: Dr. J.R. van Ossenbruggen (CWI)
*Promotion: 20 April 2010*

2010-23
Bas Steunebrink (UU)
**The Logical Structure of Emotions**
Promotor: Prof. dr. J.-J.Ch. Meyer (UU)
Copromotor: Dr. M.M. Dastani (UU)
*Promotion: 27 April 2010*

2010-24
Dmytro Tykhonov (TUD)
**Designing Generic and Efficient Negotiation Strategies**
Promotores: Prof. dr. C. M. Jonker (TUD)
Copromotor: Dr. K. Hindriks (TUD)
*Promotion: 7 June 2010*

2010-25
Zulfiqar Ali Memon (VU)
**Modelling Human-Awareness for Ambient Agents: A Human Mindreading Perspective**
Promotor: Prof. dr. J. Treur (VU)
Copromotor: Dr. T. Bosse (VU)
*Promotion: 25 May 2010*
<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
<th>Title</th>
<th>Promotores</th>
<th>Copromotor</th>
<th>Promotion Date</th>
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<tr>
<td>2010-26</td>
<td>Ying Zhang (CWI)</td>
<td>XRPC: Efficient Distributed Query Processing on Heterogeneous XQuery Engines</td>
<td>Prof. dr. M. L. Kersten (CWI/UvA)</td>
<td>Dr. P. Boncz (CWI)</td>
<td>8 July 2010</td>
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<td>2010-27</td>
<td>Marten Voulon (UL)</td>
<td>Automatisch contracteren</td>
<td>Prof. mr. H. Franken (UL), Prof. dr. H.J. van den Herik (UvT/UL)</td>
<td></td>
<td>03 June 2010</td>
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<td>2010-28</td>
<td>Arne Koopman (UU)</td>
<td>Characteristic Relational Patterns</td>
<td>Prof. dr. A.P.J.M. Siebes (UU)</td>
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<td>31 May 2010</td>
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<td>2010-29</td>
<td>Stratos Idreos (CWI)</td>
<td>Database Cracking: Towards Auto-tuning Database Kernels</td>
<td>Prof. dr. M.L. Kersten (CWI/UvA)</td>
<td>Dr. S. Manegold (CWI)</td>
<td>24 June 2010</td>
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<td>2010-30</td>
<td>Marieke van Erp (UvT)</td>
<td>Accessing Natural History - Discoveries in data cleaning, structuring, and retrieval</td>
<td>Prof. dr. A.P.J. van den Bosch (UvT)</td>
<td>Dr. P. K. Lendvai (UvT)</td>
<td>30 June 2010</td>
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<td>2010-31</td>
<td>Victor de Boer (UvA)</td>
<td>Ontology Enrichment from Heterogeneous Sources on the Web</td>
<td>Prof. dr. B.J. Wielinga (UvA)</td>
<td>Dr. M. van Someren (UvA)</td>
<td>30 September 2010</td>
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<td>2010-32</td>
<td>Marcel Hiel (UvT)</td>
<td>An Adaptive Service Oriented Architecture: Automatically solving Interoperability Problems</td>
<td>Prof. dr. W.J.A.M van den Heuvel (UvT)</td>
<td>Dr. H. Weigand (UvT)</td>
<td>07 September 2010</td>
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<td>2010-33</td>
<td>Robin Aly (UT)</td>
<td>Modeling Representation Uncertainty in Concept-Based Multimedia Retrieval</td>
<td>Prof. dr. P.G.M. Apers (UT), Prof. dr. F.M.G. de Jong (UT)</td>
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<td>02 July 2010</td>
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<td>2010-34</td>
<td>Teduh Dirgahayu (UT)</td>
<td>Interaction Design in Service Compositions</td>
<td>Prof. dr. ir. C.A. Vissers (UT)</td>
<td>Dr. M. van Sinderen (UT)</td>
<td>10 September 2010</td>
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<td>2010-35</td>
<td>Dolf Trieschnigg (UT)</td>
<td>Proof of Concept: Concept-based Biomedical Information Retrieval</td>
<td>Prof. dr. F.M.G. de Jong (UT), Prof. dr. ir. W. Kraaij (RUN)</td>
<td></td>
<td>01 September 2010</td>
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<td>2010-36</td>
<td>Jose Janssen (OU)</td>
<td>Paving the Way for Lifelong Learning; Facilitating competence development through a learning path specification</td>
<td>Prof. dr. E.J.R. Koper (OU)</td>
<td>Dr. A. Berlanga (OU))</td>
<td>17 September 2010</td>
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<td>2010-37</td>
<td>Niels Lohmann (TU/e)</td>
<td>Correctness of services and their composition</td>
<td>Prof. dr. W.M.P. van der Aalst (TU/e), Prof. dr. K. Wolf (University of Rostock)</td>
<td>Dr. N. Sidorova (TU/e)</td>
<td>27 September 2010</td>
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<td>2010-38</td>
<td>Dirk Fahland (TU/e)</td>
<td>From Scenarios to components</td>
<td>Prof. dr. W.M.P. van der Aalst (TU/e), Prof. dr. W. Reisig (Humboldt Universit&quot;at zu Berlin)</td>
<td>Prof. dr. K. Wolf (University of Rostock)</td>
<td>27 September 2010</td>
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<td>2010-39</td>
<td>Ghazanfar Farooq Siddiqui (VU)</td>
<td>Integrative modeling of emotions in virtual agents</td>
<td>Prof. dr. J. Treur (VU)</td>
<td>Dr. T. Bosse (VU), Dr. J.F. Hoorn (VU)</td>
<td>28 September 2010</td>
</tr>
</tbody>
</table>
### 2010-40
Mark van Assem (VU)
**Converting and Integrating Vocabularies for the Semantic Web**
Promotores: Prof. dr. A. Th. Schreiber (VU)
Copromotor: Dr. J.R. van Ossenbruggen (CWI/VU)
*Promotion: 01 Oktober 2010*

### 2010-41
Guillaume Chaslot (UM)
**Monte-Carlo Tree Search**
Promotores: Prof. Dr. G. Weiss (UM)
Copromotor: Dr. ir. J.W.H.M. Uiterwijk (UM), Dr. M.H.M. Winands (UM), Dr. B. Bouzy (Univ. Paris Descartes)
*Promotion: 30 September 2010*

### 2010-42
Sybren de Kinderen (VU)
**Needs-driven service bundling in a multi-supplier setting - the computational e3-service approach**
Promotores: Prof. dr. J.M Akkermans (VU)
Copromotor: Dr. J. Gordijn (VU)
*Promotion: 25 Oktober 2010*

### 2010-43
Peter van Kranenburg (UU)
**A Computational Approach to Content-Based Retrieval of Folk Song Melodies**
Promotores: Prof. dr. R.C. Veltkamp (UU), Prof. dr. L.P. Grijp (UU, Meertens Instituut)
Copromotor: Dr. F. Wiering (UU)
*Promotion: 04 Oktober 2010*

### 2010-44
Pieter Bellekens (TU/e)
**An Approach towards Context-sensitive and User-adapted Access to Heterogeneous Data Sources, Illustrated in the Television Domain**
Promotores: Prof. dr. P.M.E. De Bra (TU/e), Prof. dr. ir. G.J.P.M. Houben (TUD)
Copromotor: Dr. L.M. Aroyo (VU)
*Promotion: 7 Oktober 2010*

### 2010-45
Vasilios Andrikopoulos (UvT)
**A theory and model for the evolution of software services**
Promotor: Prof. dr. M. Papazoglou (UvT)
*Promotion: 01 Oktober 2010*

### 2010-46
Vincent Pijpers (VU)
**e3alignment: Exploring Inter-Organizational Business-ICT Alignment**
Promotores: Prof. dr. J.M. Akkermans (VU)
Co-promotor: Dr. J. Gordijn (VU)
*Promotion: 17 December 2010*

### 2010-47
Chen Li (UT)
**Mining Process Model Variants: Challenges, Techniques, Examples**
Promotor: Prof. dr. R.J. Wieringa (UT)
Co-promotor: Dr. A. Wombacher (UT)
*Promotion: 11 November 2010*

### 2010-48
Withdrawn

### 2010-49
Jahn-Takeshi Saito (UM)
**Solving difficult game positions**
Promotor: Prof. dr. G. Weiss (UM)
Co-promotor: Dr. ir. J.W.H.M. Uiterwijk (UM), Dr. M.H.M. Winands (UM)
*Promotion: 15 December 2010*

### 2010-50
Bouke Huurnink (UvA)
**Search in Audiovisual Broadcast Archives**
Promotores: Prof. dr. M. de Rijke (UvA), Prof. dr. ir A.W.M. Smeulders (UvA)
*Promotion: 26 November 2010*

### 2010-51
Alia Khairia Amin (CWI)
**Understanding and supporting information seeking tasks in multiple sources**
Promotor: Prof. dr. L. Hardman (CWI/TUE)
Copromotor: Dr. J. van Ossenbruggen (VU/CWI)
*Promotion: 08 December 2010*

### 2010-52
Peter-Paul van Maanen (VU)
**Adaptive Support for Human-Computer Teams: Exploring the Use of Cognitive Models of Trust and Attention**
Promotores: Prof. dr. J. Treur (VU)
Copromotor: Dr. T. Bosse (VU)
*Promotion: 09 December 2010*

### 2010-53
Edgar Meij (UvA)
**Combining Concepts and Language Models for Information Access**
Promotor: Prof. dr. M. de Rijke (UvA)
*Promotion: 10 December 2010*

### 2011

### 2011-01
Botond Cseke (RUN)
**Variational Algorithms for Bayesian Inference in Latent Gaussian Models**
Promotor: Prof. dr. T.M. Heskes (RUN)
*Promotion: 24 January 2011*
2011-02
Nick Tinnemeier (UU)
Organizing Agent Organizations, Syntax and Operational Semantics of an Organization-Oriented Programming Language
Promotor: Prof. dr. J.-J. Ch. Meyer (UU)
Copromotor: Dr. M.M. Dastani (UU), Dr. F. M. de Boer (CWI)
Promotion: 7 February 2011

2011-03
Jan Martijn van der Werf (TU/e)
Compositional Design and Verification of Component-Based Information Systems
Promotor: Prof. dr. K.M. van Hee (TU/e), Prof. dr. W. Reisig (Humboldt-Universität zu Berlin)
Copromotores: Prof. dr. W. Scheper (UU), Dr. N. Sidorova (TU/e)
Promotion: 15 February 2011

2011-04
Hado Philip van Hasselt (UU)
Insights in Reinforcement Learning; Formal analysis and empirical evaluation of temporal-difference learning algorithms
Promotores: Prof. dr. J.-J. Ch. Meyer (UU), Prof. dr. L.R.B. Schomaker (RUG)
Copromotor: Dr. M.A. Wiering (RUG)
Promotion: 17 January 2011

2011-05
Bas van de Raadt (VU)
Enterprise Architecture Coming of Age - Increasing the Performance of an Emerging Discipline
Promotor: Prof. dr. J.C. van Vliet (VU)
Promotion: 25 February 2011

2011-06
Yiwen Wang (TU/e)
Semantically-Enhanced Recommendations in Cultural Heritage
Promotores: Prof. dr. P.M.E. De Bra (TU/e), Prof. dr. A.Th. Schreiber (VU)
Copromotor: Dr. L.M. Aroyo (VU)
Promotion: 08 February 2011

2011-07
Yujia Cao (UT)
Multimodal Information Presentation for High Load Human Computer Interaction
Promotor: Prof. dr. ir. A. Nijholt (UT)
Copromotor: Dr. M. Theune (UT)
Promotion: 03 February 2011

2011-08
Nieske Vergunst (UU)
BDI-based Generation of Robust Task-Oriented Dialogues
Promotores: Prof. dr. J.-J. Ch. Meyer (UU)
Copromotor: Dr. ir. R.-J. Beun (UU), Dr. R van Eijk (UU)
Promotion: 09 March 2011

2011-09
Tim de Jong (OU)
Contextualised Mobile Media for Learning
Promotor: Prof. dr. E.J.R. Koper (OU), Prof. dr. M. Specht (OU)
Promotion: 10 June 2011

2011-10
Bart Bogaert (UvT)
Cloud Content Contention
Promotores: Prof. dr. H.J. van den Herik (UvT), Prof. dr. E.O. Postma (UvT)
Promotion: 30 March 2011

2011-11
Dhaval Vyas (UT)
Designing for Awareness: An Experience-focused HCI Perspective
Promotores: Prof. dr. ir. A. Nijholt (UT), Prof. dr. G. van der Veer (OU)
Copromotor: Dr. D. Heylen (UT)
Promotion: 18 February 2011

2011-12
Carmen Bratosin (TU/e)
Grid Architecture for Distributed Process Mining
Promotores: Prof. dr. W.M.P. van der Aalst (TU/e)
Copromotor: Dr. N. Sidorova (TU/e)
Promotion: 29 March 2011

2011-13
Xiaoyu Mao (UvT)
Airport under Control; Multiagent Scheduling for Airport Ground Handling
Promotor: Prof. dr. H.J. van den Herik (UvT), Prof. dr. E.O. Postma (UvT)
Copromotor: Dr. ir. N. Roos (UM), Dr. A.H. Salden (Almende B.V.)
Promotion: 25 May 2011

2011-14
Milan Lovric (EUR)
Behavioral Finance and Agent-Based Artificial Markets
Promotores: Prof. dr. J. Spronk (EUR), Prof. dr. ir. U. Kaymak (EUR, TU/e)
Promotion: 25 March 2011
2011-15
Marijn Koolen (UvA)
The Meaning of Structure: the Value of Link Evidence for Information Retrieval
Promotor: Prof. dr. J.S. MacKenzie-Owen (UvA)
Copromotor: Dr. ir. J. Kamps (UvA)
Promotion: 15 April 2011

2011-16
Maarten Schadd (UM)
Selective Search in Games of Different Complexity
Promotor: Prof. G. Weiss (UM)
Copromotor: Dr. M.H.M. Winands (UM), Dr. ir. J.W.H.M. Uiterwijk (UM)
Promotion: 25 May 2011

2011-17
Jiyin He (UvA)
Exploring Topic Structure: Coherence, Diversity and Relatedness
Promotor: Prof. dr. M. de Rijke (UvA)
Promotion: 18 May 2011

2011-18
Mark Ponsen (UM)
Strategic Decision-Making in complex games
Promotor: Prof. dr. G. Weiss (UM)
Copromotor: Dr. K. Tuyls (UM), Dr. J. Ramon (Katholieke Universiteit Leuven)
Promotion: 15 June 2011

2011-19
Ellen Rusman (OU)
The Mind ’s Eye on Personal Profiles
Promotor: Prof. dr. E.J.R. Koper (OU) en Prof. dr. P.B. Sloep (OU)
Copromotor: Dr. J.M. van Bruggen (OU)
Promotion: 17 June 2011

2011-20
Qing Gu (VU)
Guiding service-oriented software engineering - A view-based approach
Promotor: Prof. dr. J.C. van Vliet (VU)
Copromotor: Dr. P. Lago (VU)
Promotion: 06 October 2011

2011-21
Linda Terlouw (TUD)
Modularization and Specification of Service-Oriented Systems
Promotor: Prof. dr. J.L.G. Dietz (TUD)
Promotion: 05 July 2011

2011-22
Junte Zhang (UvA)
System Evaluation of Archival Description and Access
Promotor: Prof. dr. T. Thomassen (UvA)
Copromotor: Dr. J. Kamps (UvA)
Promotion: 30 September 2011

2011-23
Wouter Weerkamp (UvA)
Finding People and their Utterances in Social Media
Promotor: Prof. dr. M. de Rijke (UvA)
Promotion: 18 October 2011

2011-24
Herwin van Welbergen (UT)
Behavior Generation for Interpersonal Coordination with Virtual Humans On Specifying, Scheduling and Realizing Multimodal Virtual Human Behavior
Promotor: Prof. dr. ir. A. Nijholt (UT)
Promotion: 09 September 2011

2011-25
Syed Waqar ul Qounain Jaffry (VU)
Analysis and Validation of Models for Trust Dynamics
Promotor: Prof. dr. J. Treur (VU)
Copromotor: Dr. M. Hoogendoorn (VU)
Promotion: 09 September 2011

2011-26
Matthijs Aart Pontier (VU)
Virtual Agents for Human Communication - Emotion Regulation and Involvement-Distance Trade-Offs in Embodied Conversational Agents and Robots
Promotor: Prof. dr. J. Treur (VU), Prof. dr. E. Konijn (VU)
Copromotores: Dr. T. Bosse (VU), Dr. J. Hoorn (VU)
Promotion: 19 September 2011

2011-27
Aniel Bhulai (VU)
Dynamic website optimization through autonomous management of design patterns
Promotor: Prof. dr. G. van der Veer (VU)
Copromotor: Dr. S. Bhulai (VU)
Promotion: 25 November 2011

2011-28
Rianne Kaptein (UvA)
Effective Focused Retrieval by Exploiting Query Context and Document Structure
Promotor: Prof. dr. J.S. Mackenzie Owen (UvA)
Copromotor: Dr. J. Kamps (UvA)
Promotion: 07 October 2011
2011-29
Faisal Kamiran (TU/e)
**Discrimination-aware Classification**
Promotor: Prof. dr. Paul De Bra (TU/e)
Copromotor: Dr. T. Calders (TU/e)
*Promotion: 11 October 2011*

2011-30
Egon van den Broek (UT)
**Affective Signal Processing (ASP): Unraveling the mystery of emotions**
Promotores: Prof. dr. ir. A. Nijholt (UT), Prof. dr. T. Dijkstra (RUN)
Copromotor: Dr. J.H.D.M. Westerink (Philips Research)
*Promotion: 16 September 2011*

2011-31
Ludo Waltman (EUR)
**Computational and Game-Theoretic Approaches for Modeling Bounded Rationality**
Promotor: Prof. dr. ir. R. Dekker (EUR), Prof. dr. ir. U. Kaymak (EUR/TUE)
*Promotion: 13 October 2011*

2011-32
Nees-Jan van Eck (EUR)
**Methodological Advances in Bibliometric Mapping of Science**
Promotores: Prof. dr. ir. R. Dekker (EUR), Prof. dr. ir. J. van den Berg (TUD)
*Promotion: 13 October 2011*

2011-33
Tom van der Weide (UU)
**Arguing to Motivate Decisions**
Promotores: Prof. dr. J.-J. Ch. Meyer (UU), Prof. dr. U. H. Prakken (UU)
Copromotor: Dr. F. Dignum (UU), Dr. G.A.W. Vreeswijk (UU)
*Promotion: 10 October 2011*

2011-34
Paolo Turrini (UU)
**Strategic Reasoning in Interdependence: Logical and Game-theoretical Investigations**
Promotores: Prof. dr. J.-J. Ch. Meyer (UU), Prof. dr. A. Visser (UU)
Copromotor: Dr. J. Broersen (UU), Dr. R. Mastop (UU)
*Promotion: 17 October 2011*

2011-35
Maaike Harbers (UU)
**Explaining Agent Behavior in Virtual Training**
Promotor: Prof. dr. J.-J. Ch. Meyer (UU)
Copromotor: Dr. K. van den Bosch (TNO)
*Promotion: 02 November 2011*

2011-36
Erik van der Spek (UU)
**Experiments in serious game design: a cognitive approach**
Promotor: Prof. dr. J.-J. Ch. Meyer (UU)
Copromotor: Dr. H. van Oostendorp (UU)
*Promotion: 26 October 2011*

2011-37
Adriana Burlutu (RUN)
**Machine Learning for Pairwise Data, Applications for Preference Learning and Supervised Network Inference**
Promotor: Prof. dr. T.M. Heskes (RUN)
*Promotion: 18 October 2011*

2011-38
Nyree Lemmens (UM)
**Bee-inspired Distributed Optimization**
Promotor: Prof. dr. G. Weiss (UM)
Copromotor: Dr. K.P. Tuyls (UM)
*Promotion: 10 November 2011*

2011-39
Joost Westra (UU)
**Organizing Adaptation using Agents in Serious Games**
Promotor: Prof. dr. J.-J. Ch. Meyer (UU)
Copromotores: Dr. F. Dignum (UU), Dr. V. Dignum (TUD)
*Promotion: 19 October 2011*

2011-40
Viktor Clerc (VU)
**Architectural Knowledge Management in Global Software Development**
Promotor: Prof. dr. J.C. van Vliet (VU)
Copromotor: Dr. P. Lago (VU)
*Promotion: 13 December 2011*

2011-41
Luan Ibraimi (UT)
**Cryptographically Enforced Distributed Data Access Control**
Promotores: Prof. dr. P. Hartel (UT), Prof. dr. W. Jonker (UT)
*Promotion: 21 October 2011*

2011-42
Michal Sindlar (UU)
**Explaining Behavior through Mental State Attribution**
Promotor: Prof. dr. J.-J. Ch. Meyer (UU)
Copromotor: Dr. M.M. Dastani (UU)
*Promotion: 07 November 2011*
Appendix: SIKS Dissertations 2009-2014

2011-43
Henk van der Schuur (UU)
**Process Improvement through Software Operation Knowledge**
Promotor: Prof. Dr. S. Brinkkemper (UU)
Copromotor: Dr. S. Jansen (UU)
*Promotion: 17 November 2011*

2011-44
Boris Reuderink (UT)
**Robust Brain-Computer Interfaces**
Promotor: Prof. dr. ir. A. Nijholt (UT)
Copromotor: Dr. M. Poel (UT)
*Promotion: 21 October 2011*

2011-45
Herman Stehouwer (UvT)
**Statistical Language Models for Alternative Sequence Selection**
Promotores: Prof. dr. A.P.J. van den Bosch (RUN), Prof. dr. H.J. van den Herik (UvT)
Copromotor: Dr. M.M. van Zaanen (UvT)
*Promotion: 7 December 2011*

2011-46
Beibei Hu (TUD)
**Towards Contextualized Information Delivery: A ULe-based Architecture for the Domain of Mobile Police Work**
Promotor: Prof. dr. ir. G.J.P.M. Houben (TUD)
Copromotor: Dr. ir. A.J.H. Hidders (TUD)
*Promotion: 11 October 2011*

2011-47
Azizi Bin Ab Aziz (VU)
**Exploring Computational Models for Intelligent Support of Persons with Depression**
Promotores: Prof. dr. J. Treur (VU)
Copromotor: Dr. M.C.A. Klein (VU/UvT)
*Promotion: 6 December 2011*

2011-48
Mark Ter Maat (UT)
**Response Selection and Turn-taking for a Sensitive Artificial Listening Agent**
Promotor: Prof. dr. ir. A. Nijholt (UT), Prof. dr. D.K.J. Heylen (UT)
*Promotion: 30 November 2011*

2011-49
Andreea Niculescu (UT)
**Conversational interfaces for task-oriented spoken dialogues: design aspects influencing interaction quality**
Promotores: Prof. dr. ir. A. Nijholt (UT)
Copromotor: Dr. ir. B. van Dijk (UT)
*Promotion: 22 November 2011*

2012

2012-01
Terry Kakeeto (UvT)
**Relationship Marketing for SMEs in Uganda**
Promotor: Prof. dr.J. Chr. van Dalen (UvT), Prof. dr. H.J. van den Herik (UvT)
Copromotor: Dr.B van de Walle (UvT)
*Promotion: 01 February 2012*

2012-02
Muhammad Umair (VU)
**Adaptivity, emotion, and Rationality in Human and Ambient Agent Models**
Promotor: Prof. dr. J. Treur (VU)
Copromotor: Dr. T. Bosse (VU), Dr. M. Hoogendoorn (VU)
*Promotion: 6 February 2012*

2012-03
Adam Vanya (VU)
**Supporting Architecture Evolution by Mining Software Repositories**
Promotor: Prof. dr. J.C. van Vliet (VU)
Copromotor: Dr. A.S. Klusener (VU), Dr. R. Premraj (VU)
*Promotion: 02 March 2012*

2012-04
Jurriaan Souer (UU)
**Development of Content Management System-based Web Applications**
Promotor: Prof. dr. S Brinkkemper (UU)
Copromotor: Dr. ir. R.W. Helms (UU)
*Promotion: 28 February 2012*

2012-05
Marijn Plomp (UU)
**Maturing Interorganisational Information Systems**
Promotor: Prof. dr. S Brinkkemper (UU)
Copromotor: Dr. R. Batenburg (UU)
*Promotion: 05 March 2012*
Appendix: SIKS Dissertations 2009-2014

2012-06
Wolfgang Reinhardt (OU)
Awareness Support for Knowledge Workers in Research Networks
Promotor: Prof. dr. P.B. Sloep (OU)
Copromotor: Dr. H. Drachsler (OU)
Promotion: 05 April 2012

2012-07
Rianne van Lambalgen (VU)
When the Going Gets Tough: Exploring Agent-based Models of Human Performance under Demanding Conditions
Promotor: Prof. dr. J. Treur (VU)
Copromotor: Dr. M. Hoogendoorn (VU)
Promotion: 03 April 2012

2012-08
Gerben de Vries (UvA)
Kernel Methods for Vessel Trajectories
Promotor: Prof. dr. P.W. Adriaans (UvA)
Copromotor: Dr. M.W. van Someren (UvA)
Promotion: 04 April 2012

2012-09
Ricardo Neisse (UT)
Trust and Privacy Management Support for Context-Aware Service Platforms
Promotor: Prof. dr. R.J. Wieringa (UT)
Copromotor: Dr. M. J. van Sinderen (UT)
Promotion: 30 March 2012

2012-10
David Smits (TU/e)
Towards a Generic Distributed Adaptive Hypermedia Environment
Promotor: Prof. dr. P.M.E. De Bra (TU/e)
Copromotor: Dr. M. Pechenizkiy (TU/e)
Promotion: 02 April 2012

2012-11
J.C.B. Rantham Prabhakara (TU/e)
Process Mining in the Large: Preprocessing, Discovery, and Diagnostics
Promotor: Prof. dr. W.M.P. van der Aalst (TU/e)
Copromotor: Dr. B.J. van Dongen (TU/e)
Promotion: 14 May 2012

2012-12
Kees van der Sluijs (TU/e)
Model Driven Design and Data Integration in Semantic Web Information Systems
Promotor: Prof. dr. G.-J. Houben (TUD), Prof. dr. P.M.E. De Bra (TU/e)
Promotion: 15 May 2012

2012-13
Suleman Shahid (UvT)
Fun and Face: Exploring non-verbal expressions of emotion during playful interactions
Promotor: Prof. dr. E. Krahmer (UvT), Prof. dr. M. Swerts (UvT)
Promotion: 25 May 2012

2012-14
Evgeny Knutov (TU/e)
Generic Adaptation Framework for Unifying Adaptive Web-based Systems
Promotor: Prof. dr. P.M.E. De Bra (TU/e)
Copromotor: Dr. M. Pechenizkiy (TU/e)
Promotion: 09 May 2012

2012-15
Natalie van der Wal (VU)
Social Agents. Agent-Based Modelling of Integrated Internal and Social Dynamics of Cognitive and Affective Processes.
Promotor: Prof. dr. J. Treur (VU), Prof. dr. W.J.M.J. Cijpers (VU)
Copromotor: Dr. T. Bosse (VU)
Promotion: 07 May 2012

2012-16
Fiemke Both (VU)
Helping people by understanding them - Ambient Agents supporting task execution and depression treatment
Promotor: Prof. dr. J. Treur (VU), Prof. dr. W.J.M.J. Cijpers (VU)
Copromotor: Dr. M. Hoogendoorn (VU)
Promotion: 05 June 2012

2012-17
Amal Elgammal (UvT)
Towards a Comprehensive Framework for Business Process Compliance
Promotor: Prof. dr. M. Papazoglou (UvT), Prof. dr. W.-J. van Heuvel (UvT)
Promotion: 27 April 2012

2012-18
Eltjo Poort (VU)
Improving Solution Architecting Practices
Promotor: Prof. dr. J.C. van Vliet (VU), Prof. dr. P de With (TU/e)
Promotion: 18 June 2012

2012-19
Helen Schonenberg (TU/e)
What’s Next? Operational Support for Business Process Execution
Promotor: Prof. dr. W.M.P. van der Aalst (TU/e)
Copromotor: Dr. N Sidorova (TU/e)
Promotion: 10 May 2012
2012-20
Ali Bahramisharif (RUN)
Covert Visual Spatial Attention, a Robust Paradigm for Brain-Computer Interfacing
Promotor: Prof. dr. T.M. Heskes (RUN)
Copromotor: Dr. M.A.J. van Gerven (RUN), Dr. O. Jensen (RUN)
Promotion: 05 July 2012

2012-21
Roberto Cornacchia (TUD)
Querying Sparse Matrices for Information Retrieval
Promotor: Prof. dr. A.P. de Vries (CWI/TUD)
Promotion: 29 May 2012

2012-22
Thijs Vis (UvT)
Intelligence, politie en veiligheidsdienst: verenigbare grootheden?
Promotor: Prof. dr. H.J. van den Herik (UvT), Prof. mr. T.A. de Roos (UvT), Prof. dr. A.C.M. Spapens (UvT)
Promotion: 06 June 2012

2012-23
Christian Muehl (UT)
Toward Affective Brain-Computer Interfaces: Exploring the Neurophysiology of Affect during Human Media Interaction
Promotor: Prof. Dr. ir. A. Nijholt (UT), Prof. dr. D.K.J. Heylen (UT)
Promotion: 01 June 2012

2012-24
Laurens van der Werff (UT)
Evaluation of Noisy Transcripts for Spoken Document Retrieval
Promotor: Prof. dr. F.M.G. de Jong (UT)
Promotion: 05 July 2012

2012-25
Silja Eckartz (UT)
Managing the Business Case Development in Inter-Organizational IT Projects: A Methodology and its Application
Promotor: Prof. dr. R.J. Wieringa (UT), Prof. dr. J. van Hillegerberg (UT)
Promotion: 31 August 2012

2012-26
Emile de Maat (UvA)
Making Sense of Legal Text
Promotor: Prof. dr. T.M. van Engers (UvA)
Copromotor: Dr. R. Winkels (UvA)
Promotion: 12 September 2012

2012-27
Hayrettin Gürkök (UT)
Mind the Sheep! User Experience Evaluation & Brain-Computer Interface Games
Promotor: Prof. dr. A.Nijholt (UT)
Copromotor: Dr. M.Poe (UT)
Promotion: 21 September 2012

2012-28
Nancy Pascall (UvT)
Engendering Technology Empowering Women
Promotores: Prof. dr. H.J. van den Herik (UvT), Prof. dr. M. Diocaretz (UvT)
Promotion: 19 November 2012

2012-29
Almer Tigelaar (UT)
Peer-to-Peer Information Retrieval
Promotor: Prof. dr. P.M.G. Apers (UT)
Copromotor: Dr. ir. D. Hiemstra (UT)
Promotion: 26 September 2012

2012-30
Alina Pommeranz (TUD)
Designing Human-Centered Systems for Reflective Decision Making
Promotores: Prof. dr. C.M. Jonker (TUD)
Copromotor: Dr. P. Wiggers (TUD)
Promotion: 07 September 2012

2012-31
Emily Bagarukayo (RUN)
A Learning by Construction Approach for Higher Order Cognitive Skills Improvement, Building Capacity and Infrastructure
Promotor: Prof. dr. ir. Th. P. van der Weide (RUN)
Promotion: 02 October 2012

2012-32
Wietske Visser (TUD)
Qualitative multi-criteria preference representation and reasoning
Promotores: Prof. dr. C.M. Jonker (TUD)
Copromotor: Dr. K. Hindriks (TUD)
Promotion: 12 December 2012

2012-33
Rory Sie (OUN)
Coalitions in Cooperation Networks (COCOON)
Promotor: Prof. dr. P.B. Sloep (OUN)
Copromotor: Dr. M. Bitter-Rypkema (OUN)
Promotion: 28 September 2012

2012-34
Pavol Jancura (RUN)
Evolutionary analysis in PPI networks and applications
Promotores: Prof. dr. T. Heskes (RUN)
Copromotor: Dr. H. Marchiori (RUN)
Promotion: 15 October 2012
2012-35
Evert Haasdijk (VU)
**Never Too Old To Learn -- On-line Evolution of Controllers in Swarm- and Modular Robotics**
Promotor: Prof. dr. A. E. Eiben (VU)
*Promotion: 01 November 2012*

2012-36
Denis Ssebugwawo (RUN)
**Analysis and Evaluation of Collaborative Modeling Processes**
Promotor: Prof. dr. E. Proper (RUN)
Copromotor: Dr. S.J.B.A. Hoppenbrouwers (RUN)
*Promotion: 21 November 2012*

2012-37
Agnes Nakakawa (RUN)
**A Collaboration Process for Enterprise Architecture Creation**
Promotor: Prof. dr. E. Proper (RUN), Prof. dr. J.B.F.H. Mulder (Universiteit van Antwerpen)
Copromotor: Dr. P. van Bommel (RUN)
*Promotion: 21 November 2012*

2012-38
Selmar Smit (VU)
**Parameter Tuning and Scientific Testing in Evolutionary Algorithms**
Promotor: Prof. dr. A.E. Eiben (VU)
*Promotion: 17 Oktober 2012*

2012-39
Hassan Fatemi (UT)
**Risk-aware design of value and coordination networks**
Promotor: Prof. dr. R.J. Wieringa (UT)
Copromotor: Dr. M. van Sinderen (UT)
*Promotion: 10 October 2012*

2012-40
Agus Gunawan (UvT)
**Information Access for SMEs in Indonesia**
Promotor: Prof. dr. H. van den Herik (UvT)
Copromotor: Dr. M. Wahdan (UvT), Dr. B. van de Walle (UvT)
*Promotion: 19 December 2012*

2012-41
Sebastian Kelle (OU)
**Game Design Patterns for Learning**
Promotor: Prof. dr.M. Specht (OU)
Copromotor: Dr. R. Klemke (OU)
*Promotion: 09 November 2012*

2012-42
Dominique Verpoorten (OU)
**Reflection Amplifiers in self-regulated Learning**
Promotor: Prof. dr. M. Specht (OU), Prof. dr. W. Westera (OU)
*Promotion: 09 November 2012*

2012-43
Withdrawn

2012-44
Anna Tordai (VU)
**On Combining Alignment Techniques**
Promotor: Prof. dr. A. Th. Schreiber (VU), Prof. dr. B. Wielinga (VU)
Copromotor: Dr. J.R. van Ossenbruggen (CWI/VU)
*Promotion: 19 December 2012*

2012-45
Benedikt Kratz (UvT)
**A Model and Language for Business-aware Transactions**
Promotores: Prof. dr. M.P. Papazoglou (TiU), Prof. dr. P.W.P.J. Grefen (TU/e), Prof. dr. W.J.A.M. van den Heuvel (TiU)
*Promotion: 26 November 2012*

2012-46
Simon Carter (UvA)
**Exploration and Exploitation of Multilingual Data for Statistical Machine Translation**
Promotor: Prof. dr. M. de Rijke (UvA)
Copromotor: Dr. C. Monz (UvA)
*Promotion: 20 December 2012*

2012-47
Manos Tsagkias (UvA)
**Mining Social Media: Tracking Content and Predicting Behavior**
Promotores: Prof. dr. M. de Rijke (UvA)
*Promotion: 05 December 2012*

2012-48
Jorn Bakker (TU/e)
**Handling Abrupt Changes in Evolving Time-series Data**
Promotor: Prof. dr. P. De Bra (TU/e)
Copromotor: Dr. M. Pechenizkiy (TU/e)
*Promotion: 10 December 2012*

2012-49
Michael Kaisers (UM)
**Learning against Learning - Evolutionary dynamics of reinforcement learning algorithms in strategic interactions**
Promotores: Prof. dr. G. Weiss (UM)
Copromotores: Dr. K.P. Tuyls (UM), Prof. dr. S. Parsons (CUNY)
*Promotion: 17 December 2012*

2012-50
Steven van Kerwel (TUD)
**Ontology driven Enterprise Information Systems Engineering**
Promotor: Prof. dr. J.L.G. Dietz (TUD)
*Promotion: 03 December 2012*
Appendix: SIKS Dissertations 2009-2014

2012-51
Jeroen de Jong (TUD)
**Heuristics in Dynamic Scheduling; a practical framework with a case study in elevator dispatching**
Promotores: Prof. dr. C. Witteveen (TUD)
*Promotion: 28 November 2012*

2013

2013-01
Viorel Milea (EUR)
**News Analytics for Financial Decision Support**
Promotor: Prof. dr. ir. U. Kaymak (EUR)
Copromotor: Dr. ir. F. Francincar (TUD)
*Promotion: 07 February 2013*

2013-02
Erietta Liarou (CWI)
**MonetDB/DataCell: Leveraging the Column-store Database Technology for Efficient and Scalable Stream Processing**
Promotor: Prof. dr. M. Kersten (CWI)
Copromotor: Dr. S. Manegold (CWI)
*Promotion: 22 January 2013*

2013-03
Szymon Klarman (VU)
**Reasoning with Contexts in Description Logics**
Promotor: Prof. dr. F. van Harmelen (VU)
Copromotor: Dr. S. Schlobach (VU)
*Promotion: 27 February 2013*

2013-04
Chetan Yadati (TUD)
**Coordinating autonomous planning and scheduling**
Promotor: Prof. dr. C. Witteveen (TUD)
Copromotor: Dr. Y. Zhang (TUD)
*Promotion: 28 January 2013*

2013-05
Dulce Pumareja (UT)
**Groupware Requirements Evolutions Patterns**
Promotor: Prof. dr. R.J. Wieringa (UT)
*Promotion: 17 January 2013*

2013-06
Romulo Goncalves (CWI)
**The Data Cyclotron: Juggling Data and Queries for a Data Warehouse Audience**
Promotor: Prof. dr. M. Kersten (CWI)
*Promotion: 22 March 2013*

2013-07
Giel van Lankveld (UvT)
**Quantifying Individual Player Differences**
Promotor: Prof. dr. H.J. van den Herik (UvT), Prof. dr. A. Arntz (UM)
Copromotor: Dr. ir. P. Spronck (UvT)
*Promotion: 27 February 2013*

2013-08
Robbert-Jan Merk (VU)
**Making enemies: cognitive modeling for opponent agents in fighter pilot simulators**
Promotor: Prof. dr. J.Treur (VU)
Copromotor: Dr. J. Roessingh (NRL), Dr.M. Hoogendoorn (VU), Dr. T. Bosse (VU)
*Promotion: 06 February 2013*

2013-09
Fabio Gori (RUN)
**Metagenomic Data Analysis: Computational Methods and Applications**
Promotor: Prof. dr. T.M. Heskes (RUN), Prof. dr. ir. M.S.M. Jetten (RUN)
Copromotor: Dr. E. Marchiori (RUN)
*Promotion: 09 April 2013*

2013-10
Jeewanie Jayasinghe Arachchige (UvT)
**A Unified Modeling Framework for Service Design.**
Promotor: Prof. dr. P. Ribbers (UvT)
Copromotor: Dr. H. Weigand (UvT), Dr.M. Jeusveld (UvT)
*Promotion: 15 March 2013*

2013-11
Evangelos Pournaras (TUD)
**Multi-level Reconfigurable Self-organization in Overlay Services**
Promotor: Prof. dr. F. Brazier (TUD)
Copromotor: Dr. M. Warnier (TUD)
*Promotion: 26 March 2013*

2013-12
Marian Razavian (VU)
**Knowledge-driven Migration to Services**
Promotor: Prof. dr. H. van Vliet (VU)
Copromotor: Dr. P. Lago (VU)
*Promotion: 15 April 2013*

2013-13
Mohammad Safiri (UT)
**Service Tailoring: User-centric creation of integrated IT-based homecare services to support independent living of elderly**
Promotor: Prof. dr. R.J. Wieringa (UT)
Copromotor: Dr. M. van Sinderen (UT)
*Promotion: 07 June 2013*
2013-14
Jafar Tanha (UvA)
**Ensemble Approaches to Semi-Supervised Learning**
Promotor: Prof. dr. H. Afsramanesh (UvA)
Copromotor: Dr. M. van Someren (UvA)
Promotion: 18 April 2013

2013-15
Daniel Hennes (UM)
**Multiagent Learning - Dynamic Games and Applications**
Promotor: Prof. dr. G. Weiss (UM)
Copromotor: Dr. K. Tuyls (UM), Prof. dr. Kagan Tumer (Oregon State University)
Promotion: 16 May 2013

2013-16
Eric Kok (UU)
**Exploring the practical benefits of argumentation in multi-agent deliberation**
Promotores: Prof. dr. J-J.Ch. Meyer (UU), Prof. dr. nr. H. Prakken (UU)
Copromotor: Dr. G.A.W. Vreeswijk (UU)
Promotion: 08 May 2013

2013-17
Koen Kok (VU)
**The PowerMatcher: Smart Coordination for the Smart Electricity Grid**
Promotor: Prof. dr. J.M. Akkermans (VU)
Promotion: 04 July 2013

2013-18
Jeroen Janssens (UvT)
"**Outlier Selection and One-Class Classification**"
Promotores: Prof. dr. H.J. van den Herik (UvT), Prof. dr. E.O. Postma (UvT)
Promotion: 11 June 2013

2013-19
Renze Steenhuizen (TUD)
**Coordinated Multi-Agent Planning and Scheduling**
Promotor: Prof. dr. C. Witteveen (TUD)
Copromotor: Dr. T.B. Klos (TUD)
Promotion: 17 May 2013

2013-20
Katja Hofmann (UvA)
**Fast and Reliable Online Learning to Rank for Information Retrieval**
Promotores: Prof. dr. M. De Rijke (UvA)
Copromotor: Dr. S.A. Whiteson (UvA)
Promotion: 28 May 2013

2013-21
Sander Wubben (UvT)
**Text-to-text generation by monolingual machine translation**
Promotor: Prof. dr. E.J. Krahmer (UvT), Prof. dr. A.I.P. van den Bosch (RUN), Prof. dr. H.C. Bunt (UvT)
Promotion: 05 June 2013

2013-22
Tom Claassen (RUN)
**Causal Discovery and Logic**
Promotores: Prof. dr. T.M. Heskes (RUN)
Promotion: 14 June 2013

2013-23
Patricio de Alencar Silva (UvT)
**Value Activity Monitoring**
Promotor: Prof. dr. W.-J.van den Heuvel (UvT)
Copromotor: Dr. H. Weigand (UvT)
Promotion: 25 June 2013

2013-24
Haitham Bou Ammar (UM)
**Automated Transfer in Reinforcement Learning**
Promotores: Prof. dr. G. Weiss (UM)
Copromotor: Dr. K. Tuyls (UM), Dr. M. Taylor (Washington State University)
Promotion: 13 June 2013

2013-25
Agnieszka Anna Latoszek-Berendsen (UM)
**Intention-based Decision Support. A new way of representing and implementing clinical guidelines in a Decision Support System**
Promotor: Prof. dr. A. Hasman (UvA); Prof. dr. H.J. van Herik (UL); Prof. dr. A.P.M. Gorgels (UM)
Promotion: 26 September 2013

2013-26
Alireza Zarghani (UT)
**Architectural Support for Dynamic Homecare Service Provisioning**
Promotores: Prof. dr. R. J. Wieringa (UT)
Copromotor: Dr. M.J. van Sinderen (UT)
Promotion: 19 September 2013

2013-27
Mohammad Huq (UT)
**Inference-based Framework Managing Data Provenance**
Promotor: Prof. dr. P.M.G. Apers (UT)
Copromotor: Dr. M. Wombacher (UT)
Promotion: 01 November 2013
Appendix: SIKS Dissertations 2009-2014

2013-28
Frans van der Sluis (UT)
**When Complexity becomes Interesting: An Inquiry into the Information eXperience**
Promotores: Prof. dr. F.M.G. de Jong (UT), Prof. dr. ir. A. Nijhoff (UT)
Copromotor: Dr. E. L. van den Broek (UT)
*Promotion: 29 August 2013*

2013-29
Iwan de Kok (UT)
**Listening Heads**
Promotores: Prof. dr. D.K.J. Heylen (UT), Prof. Dr. ir. A. Nijholt (UT)
*Promotion: 12 September 2013*

2013-30
Joyce Nakatumba (TU/e)
Promotor: Prof. dr. W.M.P. van der Aalst (TU/e)
Copromotores: Dr. M. Westergaard (TU/e), Dr. J.A. Quinn (Makerere University)
*Promotion: 7 November 2013*

2013-31
Dinh Khoa Nguyen (UvT)
**Blueprint Model and Language for Engineering Cloud Applications**
Promotores: Prof. dr. W.-J. van den Heuvel (UvT), Prof. dr. ir. M. Papazoglou (UvT)
*Promotion: 01 November 2013*

2013-32
Kamakshi Rajagopal (OUN)
**Networking For Learning; The role of Networking in a Lifelong Learner’s Professional Development**
Promotor: Prof. dr. P.B. Sloep (OUN)
Copromotores: Dr. J.M. van Bruggen (OUN)
*Promotion: 22 November 2013*

2013-33
Qi Gao (TUD)
**User Modeling and Personalization in the Microblogging Sphere**
Promotor: Prof. dr. G-J. Houben (TUD)
*Promotion: 28 October 2013*

2013-34
Kien Tjin-Kam-Jet (UT)
**Distributed Deep Web Search**
Promotores: Prof. dr. P.M.G. Apers (UT), Prof. dr. F. de Jong (UT)
*Promotion: 19 December 2013*

2013-35
Abdallah El Ali (UvA)
**Minimal Mobile Human Computer Interaction**
Promotor: Prof. dr. L. Hardman (CWI/UVA)
Copromotor: Dr. F. Nack (UvA)
*Promotion: 15 November 2013*

2013-36
Than Lam Hoang (TU/e)
**Pattern Mining in Data Streams**
Promotores: Prof. dr. P.M.E. De Bra (TU/e), Prof. dr. T. Calders (VUB Brussel)
*Promotion: 02 December 2013*

2013-37
Dirk Börner (OUN)
**Ambient Learning Displays**
Promotor: Prof. dr. M. Specht (OUN)
Copromotor: Dr. M. Kalz (OUN)
*Promotion: 15 November 2013*

2013-38
Eelco den Heijer (VU)
**Autonomous Evolutionary Art**
Promotor: Prof. dr. A.E. Eiben (VU)
*Promotion: 12 December 2013*

2013-39
Joop de Jong (TUD)
**A Method for Enterprise Ontology based Design of Enterprise Information Systems**
Promotor: Prof. dr. ir. J.L.G. Dietz (TUD)
*Promotion: 25 November 2013*

2013-40
Pim Nijssen (UM)
**Monte-Carlo Tree Search for Multi-Player Games**
Promotor: Prof. dr. ir. R.L.M. Peeters (UM)
Copromotor: Dr. M.H.M. Winands (UM)
*Promotion: 02 December 2013*

2013-41
Jochem Liem (UvA)
**Supporting the Conceptual Modelling of Dynamic Systems: A Knowledge Engineering Perspective on Qualitative Reasoning**
Promotor: prof. dr. J.A. P. J. Breuker (UvA)
Copromotor: Dr. B. Bredeweg (UvA)
*Promotion: 19 December 2013*

2013-42
Léon Planken (TUD)
**Algorithms for Simple Temporal Reasoning**
Promotor: Prof. dr. C. Witteveen (TUD)
Copromotor: Dr. M.M. de Weerdt (TUD)
*Promotion: 09 December 2013*
2013-43
Marc Bron (UvA)
Exploration and Contextualization through Interaction and Concepts
Promotor: Prof. dr. M. de Rijke (UvA)
Copromotor: Dr. F. Nack, Dr. K. Balog (University of Stavanger)
Promotion: 28 November 2013

2014

2014-01
Nicola Barile (UU)
Studies in Learning Monotone Models from Data
Promotor: Prof. dr. A.P.J.M. Siebes (UU)
Copromotor: Dr. A.J. Feelders (UU)
Promotion: 10 February 2014

2014-02
Fiona Tuliyano (RUN)
Combining System Dynamics with a Domain Modeling Method
Promotor: Prof. dr. ir. H.A. Proper (RUN), Prof. dr. ir. Th.P. van der Weide (RUN)
Copromotor: Dr. P. Van Bommel
Promotion: 27 January 2014

2014-03
Sergio Raul Duarte Torres (UT)
Information Retrieval for Children: Search Behavior and Solutions
Promotor: Prof. dr. P.M.G. Apers (UT), Prof. dr. T.W.C. Huibers (UT)
Copromotor: Dr. ir. D. Hiemstra (UT)
Promotion: 14 February 2014

2014-04
Hanna Jochmann-Mannak (UT)
Websites for children: search strategies and interface design - Three studies on children's search performance and evaluation
Promotor: Prof. dr. T.W.C Huibers (UT), Prof. dr. L.R. Lentz (UU)
Copromotor: Prof. dr. T.J.M. Sanders (UU)
Promotion: 09 January 2014

2014-05
Jurriaan van Reijsen (UU)
Knowledge Perspectives on Advancing Dynamic Capability
Promotor: Prof. dr. S. Brinkkemper (UU)
Copromotor: Prof. dr. R. Helms (UU)
Promotion: 19 March 2014

2014-06
Damian Tamburri (VU)
Supporting Networked Software Development
Promotor: Prof. dr. J.C. van Vliet (VU)
Copromotor: Dr. P. Lago (VU)
Promotion: 19 March 2014

2014-07
Arya Adriansyah (TU/e)
Aligning Observed and Modeled Behavior
Promotor: Prof. dr. W.M.P. van der Aalst (TU/e)
Copromotor: Dr. B.F. van Dongen (TU/e)
Promotion: 03 April 2014

2014-08
Samur Araujo (TUD)
Data Integration over Distributed and Heterogeneous Data Endpoints
Promotor: Prof. Dr. ir. H. Reinders (TUD), Prof. dr. ir. A.P. de Vries (TUD/CWI)
Promotion: 04 February 2014

2014-09
Philip Jackson (UVT)
Toward Human-Level Artificial Intelligence: Representation and Computation of Meaning in Natural Language
Promotor: Prof. dr. H. Bunt (UVT), Prof. dr. W. Daelemans (University of Antwerp)
Promotion: 22 April 2014

2014-10
Ivan Salvador Razo Zapata (VU)
Service Value Networks
Promotor: Prof. dr. J.M. Akkermans (VU)
Copromotores: Dr. P. De Leenheer (VU), Dr. J. Gordijn (VU)
Promotion: 20 May 2014

2014-11
Janneke van der Zwaan (TUD)
An Empathic Virtual Buddy for Social Support
Promotor: Prof. dr. C. Jonker (TUD)
Copromotor: Dr. V. Dignum (TUD)
Promotion: 10 March 2014

2014-12
Willem van Willigen (VU)
Look Ma, No Hands: Aspects of Autonomous Vehicle Control
Promotor: Prof. dr. A.E. Eiben (VU)
Copromotores: Dr. E. Haasdijk (VU), Dr. ir. L. Kester (TNO)
Promotion: 28 May 2014
2014-13
Arlette van Wissen (VU)
Agent-Based Support for Behavior Change: Models and Applications in Health and Safety Domains
Promotor: Prof. dr. J. Treur (VU)
Copromotor: Dr. M.C.A. Klein (VU)
Promotion: 25 March 2014

2014-14
Yangyang Shi (TUD)
Language Models With Meta-information
Promotor: Prof. dr. C. Jonker (TUD)
Copromotor: Dr. M. Larson (TUD)
Promotion: 11 March 2014

2014-15
Natalya Mogles (VU)
Agent-Based Analysis and Support of Human Functioning in Complex Socio-Technical Systems: Applications in Safety and Healthcare
Promotor: Prof. dr. J. Treur (VU)
Copromotor: Dr. T. Bosse (VU), Dr. M.C.A. Klein (VU)
Promotion: 08 April 2014

2014-16
Krystyna Milian (VU)
Supporting trial recruitment and design by automatically interpreting eligibility criteria
Promotor: Prof. dr. F.A.H. van Harmelen (VU)
Copromotores: Dr. A. Ten Teije (VU)
Promotion: 07 April 2014

2014-17
Kathrin Dentler (VU)
Computing healthcare quality indicators automatically: Secondary Use of Patient Data and Semantic Interoperability
Promotor: Prof. dr. F.A.H. van Harmelen (VU)
Copromotores: Dr. ir. R. Cornet (UvA), Dr. N.F. de Keizer (UvA), Dr. A. ten Teije (VU)
Promotion: 19 May 2014

2014-18
Mattijs Ghijsen (VU)
Methods and Models for the Design and Study of Dynamic Agent Organizations
Promotor: Prof. dr. B.J. Wielinga (UvA)
Copromotor: Dr. W.N.H Jansweijer (UvA)
Promotion: 09 April 2014

2014-19
Vinicius Ramos (TU/e)
Adaptive Hypermedia Courses: Qualitative and Quantitative Evaluation and Tool Support
Promotores: Prof. dr. P.M.E. De Bra (TU/e) and Prof. dr. G.B. Xexeo (Federal University of Rio de Janeiro)
Copromotor: Dr. M. Pechenizkiy (TU/e)
Promotion: 29 April 2014

2014-20
Mena Habib (UT)
Named Entity Extraction and Disambiguation for Informal Text: The Missing Link
Promotor: Prof. dr. P.M.G. Apers (UT)
Copromotor: Dr. M. van van Keulen (UT)
Promotion: 09 May 2014

2014-21
Kassidy Clark (TUD)
Negotiation and Monitoring in Open Environments
Promotor: Prof. dr. F.M.T. Brazier (TUD)
Promotion: 14 May 2014

2014-22
Marieke Peeters (UU)
Personalized Educational Games - Developing agent-supported scenario-based training
Promotor: Prof. dr. J.-J. Ch. Meyer (UU), Prof. dr. M.A. Neerincx (TNO/TUD)
Copromotor: Dr. K. van den Bosch (TNO)
Promotion: 05 June 2014

2014-23
Eleftherios Sidirourgos (UvA/CWI)
Space Efficient Indexes for the Big Data Era
Promotor: Prof. dr. M. Kersten (CWI/UvA), Prof. dr. P. Boncz (CWI/VU)
Promotion: 14 May 2014

2014-24
Davide Ceolin (VU)
Trusting Semi-structured Web Data
Promotor: Prof. dr. A.Th. Schreiber (VU), Prof. dr. W.J. Fokkink (VU)
Copromotor: Dr. W.R. van Hage (VU)
Promotion: 02 July 2014

2014-25
Martijn Lappenschaar (RUN)
New network models for the analysis of disease interaction
Promotor: Prof. dr. P. Lucas (RUN)
Copromotor: Dr. A. Hommersom (RUN)
Promotion: 02 June 2014

2014-26
Tim Baarslag (TUD)
What to Bid and When to Stop
Promotor: Prof. dr. C.M. Jonker (TUD)
Copromotor: Dr. K.V. Hindriks (TUD)
Promotion: 18 September 2014
2014-27
Rui Jorge Almeida (EUR)
Conditional Density Models Integrating Fuzzy and Probabilistic Representations of Uncertainty
Promotor: Prof. dr. ir. U. Kaymak (TU/e), Prof. dr. ir. J. Miguel da Costa Sousa (Universidade de Lisboa)
Promotion: 26 June 2014

2014-28
Anna Chmielowiec (VU)
Decentralized k-Clique Matching
Promotor: Prof. Dr. ir. M.R. van Steen (VU)
Copromotor: Dr. S. Voulgaris (VU)
Promotion: 18 September 2014

2014-29
Jaap Kabbedijk (UU)
Variability in Multi-Tenant Enterprise Software
Promotor: Prof. dr. S. Brinkkemper (UU), Prof. dr. J.C. Wortmann (RUG)
Copromotor: Dr. S.R.L. Jansen (VU)
Promotion: 20 October 2014

2014-30
Peter de Cock (UvT)
Anticipating Criminal Behaviour
Promotor: Prof. dr. H.J. van den Herik (UL), Prof. dr. J.C. Scholtes (UM)
Copromotor: Dr. ir. P.H.M. Spronck (UvT)
Promotion: 10 September 2014

2014-31
Leo van Moergestel (UU)
Agent Technology in Agile Multiparallel Manufacturing and Product Support
Promotor: Prof. dr. J.-J. Ch. Meyer (UU)
Promotion: 10 September 2014

2014-32
Naser Ayat (UvA)
On Entity Resolution in Probabilistic Data
Promotor: Prof. dr. H. Afsarmanesh (UvA), Prof. dr. P. Valduriez (INRIA)
Copromotor: Dr. R. Akbarinia (INRIA)
Promotion: 30 September 2014

2014-33
Tesfa Tegegne (RUN)
Service Discovery in eHealth
Promotor: Prof. dr. ir. Th.P. Van der Weide (RUN)
Promotion: 05 September 2014

2014-34
Christina Manteli (VU)
The Effect of Governance in Global Software Development: Analyzing Transactive Memory Systems.
Promotor: Prof. dr. H. Van Vliet (VU), Prof. dr. B.J. van den Hooff (VU)
Promotion: 15 October 2014

2014-35
Joost van Oijen (UU)
Cognitive Agents in Virtual Worlds: A Middleware Design Approach
Promotor: Prof. dr. J.-J. Ch. Meyer (UU)
Copromotor: Dr. F. Dignum (UU)
Promotion: 28 October 2014

2014-36
Joos Buijs (TU/e)
Promotor: Prof. Dr. ir. W.M.P. van der Aalst (TU/e)
Copromotor: Dr. ir. B.F. van Dongen (TU/e)
Promotion: 28 October 2014

2014-37
Maral Dadvar (UT)
Experts and Machines United Against Cyberbullying
Promotor: Prof. dr. F. De Jong (UT)
Copromotor: Dr. F. Dignum (UU)
Promotion: 12 September 2014

2014-38
Danny Plass-Oude Bos (UT)
Making brain-computer interfaces better: improving usability through post-processing.
Promotor: Prof. dr. A. Nijholt (UT)
Copromotor: Dr. M. Poel (UT)
Promotion: 21 November 2014

2014-39
Jasmina Maric (UvT)
Web Communities, Immigration, and Social Capital
Promotor: Prof. dr. H.J. van den Herik (UL)
Copromotor: Dr.R. Cozijn (UvT), Dr. M. Spotti (UvT)
Promotion: 18 November 2014

2014-40
Walter Omona (RUN)
A Framework for Knowledge Management Using ICT in Higher Education.
Promotor: Prof. dr. ir. Th. van der Weide (RUN), Prof. dr. P.H.J. Hendriks
Promotion: 03 December 2014
Appendix: SIKS Dissertations 2009-2014

2014-41
Frederic Hogenboom (EUR)
Automated Detection of Financial Events in News Text
Promotor: Prof. dr. ir. U. Kaymak (TU/e), Prof. dr. F.M.G. de Jong (UT/EUR)
Copromotor: Dr. F. Frasincar (EUR)
Promotion: 11 December 2014

2014-42
Carsten Eijckhof (CWI/TUD)
Contextual Multidimensional Relevance Models
Promotor: Prof. dr. ir. A.P. De Vries (CWI/TUD)
Promotion: 14 Oktober 2014

2014-43
Kevin Vlaanderen (UU)
Supporting Process Improvement using Method Increments
Promotor: Prof. dr. S. Brinkkemper (UU)
Copromotor: Dr. G.C. Van de Weerd (VU), Dr. F. Dalpiaz (UU)
Promotion: 11 December 2014

2014-44
Paulien Meesters (UvT)
Intelligent Blauw. Met als ondertitel: Intelligence-gestuurde politiezorg in gebiedsgebonden eenheden.
Promotor: Prof. dr.H.J. van den Herik (UL), Prof. dr. Th. De Roos (UvT)
Promotion: 01 December 2014

2014-45
Birgit Schmitz (OUN)
Mobile Games for Learning: A Pattern-Based Approach
Promotor: Prof. dr. M. Specht (OUN)
Copromotor: Dr. R. Klemke (OUN)
Promotion: 12 December 2014

2014-46
Ke Tao (TUD)
Social Web Data Analytics: Relevance, Redundancy, Diversity
Promotor: Prof. dr. ir. G.J. Houben (TUD)
Copromotor: Dr. C. Hauff (TUD) Promotion: 09 December 2014

2014-47
Shangsong Liang (UvA)
Fusion and Diversification in Information Retrieval
Promotor: Prof. dr. M. De Rijke (UvA)
Promotion: 15 December 2014
### SIKS promotions per university:

<table>
<thead>
<tr>
<th>University</th>
<th>Promotions</th>
</tr>
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<tbody>
<tr>
<td>Vrije Universiteit Amsterdam</td>
<td>48</td>
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<tr>
<td>Universiteit Utrecht</td>
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<td>University of Twente</td>
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<tr>
<td>University of Amsterdam</td>
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<tr>
<td>Delft University of Technology</td>
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<td>Eindhoven University of Technology</td>
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<td>Radboud University</td>
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<td>Maastricht University</td>
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<td>Tilburg University</td>
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<td>Open Universiteit</td>
<td>14</td>
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<tr>
<td>Centrum Wiskunde &amp; Informatica</td>
<td>13</td>
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<tr>
<td>Erasmus Universiteit Rotterdam *</td>
<td>6</td>
</tr>
<tr>
<td>Universiteit Leiden*</td>
<td>5</td>
</tr>
</tbody>
</table>

**Total** 287

* = associated member