

Curriculum Vitae

**Assoc. Prof. Dr. Boris Shishkov**

Sofia, February 2019

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# Contents

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1.	Details .....	3
2.	Current Positions .....	3
3.	Past Employment .....	4
4.	Academic Education .....	5
5.	Research Interests .....	5
6.	IICREST .....	6
7.	BMSD .....	8
8.	Books Authored by Boris Shishkov .....	9
9.	Lecturing .....	10
10.	Examiner in PhD / M.Sc. Committees .....	10
11.	Books (Co-) Edited by B. Shishkov .....	11
12.	Conference Organization .....	15
13.	R&D Projects .....	18
14.	Publications .....	23
15.	Other .....	32

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# 1. Details

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**Surname:** Shishkov  
**Firstname:** Boris  
**Initials:** B.B.  
**Born in:** Sofia, Bulgaria  
**Nationality:** Bulgarian  
**e-Mail:** boris9@rocketmail.com  
**Website:** www.borishishkov.com  
**Mobile:** +359 888 534435  
**Correspondence Address:** B. Shishkov; PO Box 104; 1618 Sofia; Bulgaria

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# 2. Current Positions

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**Associate Professor** (since 2018)

*University of Library Studies and  
Information Technology* (BG)  
Faculty of Information Sciences

**Senior Researcher** (since 2015)

*Bulgarian Academy of Sciences* (BG)  
Institute of Mathematics and Informatics

**Chairman** (since 2007)

*IICREST – Interdisciplinary Institute for  
Collaboration and Research on  
Enterprise Systems and Technology*

**Visiting Lecturer & Researcher** (since 2017)

*Delft University of Technology* (NL)  
Faculty of Technology, Policy, & Management

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## 3. Past Employment

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- 2008 - 2010
- Assistant Professor
  - Delft University of Technology (NL)
    - Faculty of Technology, Policy, and Management
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- 2007 - 2008
- Researcher
  - University of Twente (NL)
    - Faculty of El. Engineering, Mathematics & Computer Science
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- 2005 - 2007
- Postdoc
  - University of Twente (NL)
    - Faculty of El. Engineering, Mathematics & Computer Science
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- 2004 - 2005
- ERP Consultant
  - Weast Ven Man B.V. (NL)
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- 2000 - 2004
- Doctorant
  - Delft University of Technology (NL)
    - Faculty of El. Engineering, Mathematics & Computer Science
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- 1997 - 1999
- Expert
  - Holding St. Sofia PLC (BG)
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- 1995 - 1996
- Project Coordinator
  - Information Environmental Center (BG)
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## 4. Academic Education

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- 2005
- DOCTOR (PhD) in Computer Science
  - Delft University of Technology (NL)

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- 1999
- M.Sc. in Management Information Systems (graduation with distinction)
  - Sofia University "St. Kl. Ohridski" (BG)
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## 5. Research Interests

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business modeling and software design	autonomic systems
enterprise systems and information systems	context-aware systems
business processes and enterprise engineering	value-sensitive design
enterprise models, requirements, and software specifications	data analytics
business-IT alignment	classification and regression
service-oriented computing	machine learning
model-driven engineering	data aspects in business modeling and software development
information systems architectures and paradigms	data semantics and ontologies

social theories and computing paradigms	statistical data analysis and probabilistic business models
blockchain-based business models and information systems	IoT and implications for enterprise information systems
modeling languages and notations	neural networks

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## 6. IICREST

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Dr. Boris Shishkov has established (in 2007) and currently leads *IICREST* – the *Interdisciplinary Institute for Collaboration and Research on Enterprise Systems and Technology* (<http://www.iicrest.org>). *IICREST* is an international institute domiciled in Bulgaria, that aims at promoting and exploiting Bulgaria’s potential in the creation and introduction of new services and technologies in the dynamically developing Bulgarian Society. As an independent IT institute in the form of an NGO, *IICREST* is in a position to offer an objective unbiased opinion in the evaluation of needs, study of requirements, organization of the working teams, and implementation of new services and technologies. For this *IICREST* draws expertise from key academic / public figures not only from Bulgaria but also from its extended network to Greece, Portugal, Switzerland, and The Netherlands, and United Kingdom.

The mission of *IICREST* is to be an **internationally acknowledged interdisciplinary research and knowledge transfer institute in the area of design (and development) of automated (software) systems and their application in domains of high societal relevance, rooting this in proper enterprise models**. Hence, among the institute’s strategic goals are envisioned the following:

- To advance interdisciplinary research in enterprise systems and their related technological support systems, through possible funding from EU and other sources;
- To disseminate relevant knowledge among academia and business in different European countries, through scientific events, such as conferences, symposia, and workshops;
- To provide advice and consultancy services, possibly through knowledge transfer initiatives.

The strong international leadership of *IICREST* has been inspired by its Board:

- [2017 - ] **Dr. Boris Shishkov** (Chairman), **Dr. Vaughan Michell** (University of Reading, United Kingdom), **Dr. Marten van Sinderen** (University of Twente, The Netherlands);
- [2012 – 2017] **Dr. Boris Shishkov** (Chairman), **Dr. Dimitris Mitrakos** (Aristotle University of Thessaloniki, Greece), **Dr. Marten van Sinderen** (University of Twente, The Netherlands);
- [2007 – 2012] **Dr. Boris Shishkov** (Chairman), **Prof. Dr. Joaquim Filipe** (Polytechnic Institute of Setúbal (Portugal), **Prof. Dr. Dimitri Konstantas** (University of Geneva, Switzerland), **Prof. Dr. Mihail Konstantinov** (University of Architecture, Civil Engineering and Geodesy, Bulgaria), **Dr. Dimitris Mitrakos** (Aristotle University of Thessaloniki, Greece), **MEP Nadezhda Neynsky** (former Bulgarian Foreign Minister), **Dr. Marten van Sinderen** (University of Twente, The Netherlands).

The research orientation of *IICREST* concerns three strategic research areas, namely: (i) **Enterprise systems and aligned IT services**; (ii) **High-speed and media-rich networking**; (iii) **Enterprise optimization and applied numerical methods**, as well as five strategic application domains, namely a) Wellbeing; b) Area and Border Security; c) Transport; d) Sustainability; e) Learning.

*IICREST* has contributed to a number of projects / project-related activities, such as: *Li-La (Library of Labs)*, *EU-SOLE (Employees' Upskilling through Service-Oriented Learning Environments)*, and *SACOS (Secure ad-hoc Communication System)*. Some other minor activities concern Affective Computing, Cloud Computing, Traffic Management, and Tele-Dermatology.

Further, *IICREST* has supported several knowledge transfer initiatives (supposed to benefit the developments in Bulgaria) that have not yet given results however: (i) *Geneva-Sofia exchange* (municipality level); (ii) *Rotterdam-Burgas exchange* (municipality level); (iii) *Thessaloniki-Sofia exchange* (enterprise level).

Finally, *IICREST* has initiated research in ENTERPRISE SYSTEMS AND TECHNOLOGY FOR AREA AND BORDER SECURITY; among the topics of interest are: (a) *Enterprise Models concerning Border Security*; (b) *Situation-aware Border Security Control*; (c) *Rules and Regulations at the Border*; (d) *Privacy Aspects of Border Security*.

As it concerns dissemination, *IICREST* has (co-)organized (and is currently (co-)organizing) a number of scientific events, including:

- Two prestigious events, namely: (i) **BMSD** (<http://www.is-bmsd.org>) – **International Symposium on Business Modeling and Software Design**, running successfully for 9 years already; BMSD has attracted as Keynote Lecturers some of the most outstanding experts in the area; currently, the BMSD proceedings Publisher is Springer; (ii) **ICTRS** (<http://www.ictrs.org>) – **International Conference on Telecommunications and Remote Sensing**, running successfully for 8 years already; ICTRS is currently organized under the auspices of URSI (<http://www.ursi.org>), in Memory of *Prof. Blagovest Shishkov*; currently the ICTRS proceedings Publisher is ACM.

- Several minor events, namely: **EHST** (International Symposium on e-Health Services and Technologies), **ISRSSP** (International Symposium on Radio Systems and Space Plasma), **FIATS-M** (International Symposium: Future Internet Applications for Traffic Surveillance and Management). **ICGREEN** (International Conference on Green IT Solutions), **INNOV** (International Multi-Conference on Innovative Developments in ICT).
- **IICREST** has co-organized **ICSOFT 2009** (<http://www.icsoft.org>) – the Fourth International Conference on Software and Data Technologies.

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## 7. BMSD

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**Dr. Boris Shishkov** has established (in 2011) and currently leads (having served as General Chair + Program Chair in all editions so far) *BMSD* – the *International Symposium on Business Modeling and Software Design* (<http://www.is-bmsd.org>). *BMSD* is an **annual international symposium** that brings together researchers and practitioners who are inspired to consider the challenge of bringing together enterprise modeling and software specification. We have enjoyed 8 successful *BMSD* editions so far, namely: **Sofia-BG** 2011 (Edition Theme: *Business Models and Advanced Software Systems*); **Geneva-CH** 2012 (Edition Theme: *From Business Modeling to Service-Oriented Solutions*); **Noordwijkerhout-NL** 2013 (Edition Theme: *Enterprise Engineering and Software Generation*); **Luxembourg-LU** 2014 (Edition Theme: *Generic Business Modeling Patterns and Software Re-Use*); **Milan-IT** 2015 (Edition Theme: *Towards Adaptable Information Systems*); **Rhodes-GR** 2016 (Edition Theme: *Integrating Data Analytics in Enterprise Modeling and Software Development*); **Barcelona-ES** 2017 (Edition Theme: *Modeling Viewpoints and Overall Consistency*); **Vienna-AT** (Edition Theme: *Enterprise Engineering and Software Engineering – Processes and Systems for the Future*). In 2019, *BMSD* is going to **Lisbon-PT**.

*BMSD* has attracted distinguished guests as Keynote Lecturers, who are renowned experts in their fields: **J. Tribolet** (Lisbon, Portugal) – 2019; **J. Mendling** (Vienna, Austria) – 2018; **R. Oberhauser** (Aalen, Germany) – 2018; **N. Gronau** (Potsdam, Germany) – 2017; **O. Pastor** (Valencia, Spain) – 2017; **A. Verbraeck** (Delft, The Netherlands) – 2017; **P. Avgeriou** (Groningen, The Netherlands) – 2016; **J. Juerjens** (Koblenz, Germany) – 2016; **M. Kirchmer** (Philadelphia, USA) – 2016; **M. Janssen** (Delft, The Netherlands) – 2015; **B. Pernici** (Milan, Italy) – 2015; **E. Proper** (Luxembourg, Grand Duchy of Luxembourg) – 2014; **R. Wieringa** (Enschede, The Netherlands) – 2014; **K. Liu** (Reading, United Kingdom)



– 2013; **M. Aiello** (Groningen, The Netherlands) – 2013; **L. Maciaszek** (Wroclaw, Poland) – 2013; **J.L.G. Dietz** (Delft, The Netherlands) – 2012; **I. Ivanov** (New York, USA) – 2012; **D. Konstantas** (Geneva, Switzerland) – 2012; **M. Van Sinderen** (Enschede, The Netherlands) – 2012; **M. Aksit** (Enschede, The Netherlands) – 2011; **D. Christozov** (Blagoevgrad, Bulgaria) – 2011; **B. Nieuwenhuis** (Enschede, The Netherlands), and **H. Maurer** (Graz, Austria) – 2011.

*BMSD* has been maintaining (for many years already) high scientific quality and stimulating collaborative atmosphere.

Currently, the *BMSD* proceedings Publisher is **Springer**.

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## 8. Books Authored by Boris Shishkov

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- 2019
- Title: Designing Enterprise Information Systems, Merging Enterprise Modeling and Software Specification
  - Publisher: Springer

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- 2017
- Title: Enterprise Information Systems, A Modeling Approach (Monograph)
  - Publisher: IICREST Press

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- 2005
- Title: Software Specification Based on Re-usable Business Components (PhD Thesis)
  - Publisher: TU Delft Press
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## 9. Lecturing

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B.Sc. courses

**DATA ANALYTICS**

TU Delft

2018-2019

Lecturer: **Dr. Boris Shishkov**

Course Manager: **Dr. Boris Shishkov**

Coordinator: **Dr. Boris Shishkov**

B.Sc. courses

**MODELING OF PROCESSES AND SYSTEMS**

ULSIT

2018-2019

Co-Lecturer: **Dr. Boris Shishkov**

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## 10. Examiner in PhD / M.Sc. Committees

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- **Sélinde van Engelenburg**, *Designing Context-Aware Architectures for Business-to-Government Information Sharing (PhD Thesis)*, Delft University of Technology, The Netherlands, 2019 (defence committee).
- **Philip Huysmans**, *On the Feasibility of Normalized Enterprises: Applying Normalized Systems Theory to the High-Level Design of Enterprises (PhD Thesis)*, University of Antwerp, Belgium, 2011 (defence committee).

- **Emiel Schoot Uiterkamp**, *Nomadic Positioning Services for a Mobile Service Platform (M.Sc. Thesis)*, University of Twente, The Netherlands, 2005 (defence committee)

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## 11. Books (Co-)Edited by B. Shishkov

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1. Andon Lazarov, Boris Shishkov, Marijn Janssen, Dimitris Mitrakos (Eds.): ICTRS 2018 - Proceedings of the 7<sup>th</sup> International Conference on Telecommunications and Remote Sensing, Barcelona, Spain, October 8-9, 2018. ACM 2018, ISBN: 978-1-4503-6580-2
2. Boris Shishkov (Ed.): BMSD 2018 - Proceedings of the 8<sup>th</sup> International Symposium on Business Modeling and Software Design, Vienna, Austria, July 2-4, 2018. Springer (LNBIP 319) 2018, ISBN 978-3-319-94213-1
3. Boris Shishkov (Ed.): Business Modeling and Software Design – 7<sup>th</sup> International Symposium, BMSD 2017, Barcelona, Spain, July 3-5, 2017, Revised Selected Papers. Lecture Notes in Business Information Processing 309, Springer 2018, ISBN: 978-3-319-78427-4
4. Boris Shishkov, Marijn Janssen, Andon Lazarov, Dimitris Mitrakos (Eds.): ICTRS 2017 - Proceedings of the 6<sup>th</sup> International Conference on Telecommunications and Remote Sensing, Delft, The Netherlands, November 6-7, 2017. ACM 2017, ISBN: 978-1-4503-6364-8
5. Boris Shishkov (Ed.): BMSD 2017 - Proceedings of the 7<sup>th</sup> International Symposium on Business Modeling and Software Design, Barcelona, Spain, July 3-5, 2017. SciTePress 2017, ISBN 978-989-758-238-7
6. Boris Shishkov (Ed.): Business Modeling and Software Design – 6<sup>th</sup> International Symposium, BMSD 2016, Rhodes, Greece, June 20-22, 2016, Revised Selected Papers. Lecture Notes in Business Information Processing 275, Springer 2017
7. Andon Lazarov, Dimitris Mitrakos, Boris Shishkov (Eds.): ICTRS 2016 - Proceedings of the 5<sup>th</sup> International Conference on Telecommunications and Remote Sensing, Milan, Italy, October 10-11, 2016. SciTePress 2016, ISBN 978-989-758-200-4
8. Boris Shishkov (Ed.): BMSD 2016 - Proceedings of the 6<sup>th</sup> International Symposium on Business Modeling and Software Design, Rhodes, Greece, June 20-22, 2016. SciTePress 2016, ISBN 978-989-758-190-8
9. Boris Shishkov (Ed.): Business Modeling and Software Design – 5<sup>th</sup> International Symposium, BMSD 2015, Milan, Italy, July 6-8, 2015, Revised Selected Papers. Lecture Notes in Business Information Processing 257, Springer 2016, ISBN 978-3-319-40511-7

10. Blagovest Shishkov, Andon Lazarov, Naoki Shinohara, Leszek Maciaszek, Boris Shishkov (Eds.): ICTRS 2015 - Proceedings of the 4<sup>th</sup> International Conference on Telecommunications and Remote Sensing, Rhodes, Greece, September 17-18, 2015. SciTePress 2015, ISBN 978-989-758-152-6
11. Boris Shishkov (Ed.): BMSD 2015 - Proceedings of the 5<sup>th</sup> International Symposium on Business Modeling and Software Design, Milan, Italy, July 6-8, 2015. SciTePress 2015, ISBN 978-989-758-111-3
12. Boris Shishkov (Ed.): Business Modeling and Software Design – 4<sup>th</sup> International Symposium, BMSD 2014, Luxembourg, Luxembourg, June 24-26, 2014, Revised Selected Papers. Lecture Notes in Business Information Processing 220, Springer 2015, ISBN 978-3-319-20051-4
13. Boris Shishkov (Ed.): BMSD 2014 - Proceedings of the 4<sup>th</sup> International Symposium on Business Modeling and Software Design, Luxembourg, Grand Duchy of Luxembourg, June 24-26, 2014. SciTePress 2014, ISBN 978-989-758-032-1
14. Boris Shishkov (Ed.): Business Modeling and Software Design - Third International Symposium, BMSD 2013, Noordwijkerhout, The Netherlands, July 8-10, 2013, Revised Selected Papers. Lecture Notes in Business Information Processing 173, Springer 2014, ISBN 978-3-319-06670-7
15. Boris Shishkov (Ed.): BMSD 2013 - Proceedings of the Third International Symposium on Business Modeling and Software Design, Noordwijkerhout, The Netherlands, July 8-10, 2013. SciTePress 2013, ISBN 978-989-8565-56-3
16. Boris Shishkov (Ed.): Business Modeling and Software Design - Second International Symposium, BMSD 2012, Geneva, Switzerland, July 4-6, 2012, Revised Selected Papers. Lecture Notes in Business Information Processing 142, Springer 2013, ISBN 978-3-642-37477-7
17. Boris Shishkov (Ed.): BMSD 2012 - Proceedings of the Second International Symposium on Business Modeling and Software Design, Geneva, Switzerland, July 4-6, 2012. SciTePress 2012, ISBN 978-989-8565-26-6
18. Boris Shishkov (Ed.): Business Modeling and Software Design - First International Symposium, BMSD 2011, Sofia, Bulgaria, July 27-28, 2011, Revised Selected Papers. Lecture Notes in Business Information Processing 109, Springer 2012, ISBN 978-3-642-29787-8
19. Boris Shishkov (Ed.): BMSD 2011 - Proceedings of the First International Symposium on Business Modeling and Software Design, Sofia, Bulgaria, July 27-28, 2011. SciTePress 2011, ISBN 978-989-8425-68-3
20. Boris Shishkov (Ed.): INNOV 2011 - Proceedings of the Second International Conference on Innovative Developments in ICT, Sofia, Bulgaria, July 25-27, 2011. SciTePress 2011, ISBN 978-989-8425-67-6
21. Frank Leymann, Ivan Ivanov, Marten van Sinderen, Boris Shishkov (Eds.): CLOSER 2011 - Proceedings of the 1<sup>st</sup> International Conference on Cloud Computing and Services Science, Noordwijkerhout, The Netherlands, 7-9 May, 2011. SciTePress 2011, ISBN 978-989-8425-52-2
22. Alexander Verbraeck, Markus Helfert, José Cordeiro, Boris Shishkov (Eds.): CSEDU 2011 - Proceedings of the 3<sup>rd</sup> International Conference on Computer Supported Education, Volume 1, Noordwijkerhout, The Netherlands, 6-8 May, 2011. SciTePress 2011, ISBN 978-989-8425-49-2

23. Alexander Verbraeck, Markus Helfert, José Cordeiro, Boris Shishkov (Eds.): CSEDU 2011 - Proceedings of the 3<sup>rd</sup> International Conference on Computer Supported Education, Volume 2, Noordwijkerhout, The Netherlands, 6-8 May, 2011. SciTePress 2011, ISBN 978-989-8425-50-8
24. David A. Marca, Boris Shishkov, Marten van Sinderen (Eds.): ICE-B 2011 - Proceedings of the International Conference on e-Business, Seville, Spain, 18-21 July, 2011, ICE-B is part of ICETE - The International Joint Conference on e-Business and Telecommunications. SciTePress 2011, ISBN 978-989-8425-70-6
25. María José Escalona Cuaresma, Boris Shishkov, José Cordeiro (Eds.): ICSOFT 2011 - Proceedings of the 6<sup>th</sup> International Conference on Software and Data Technologies, Volume 1, Seville, Spain, 18-21 July, 2011. SciTePress 2011, ISBN 978-989-8425-76-8
26. María José Escalona Cuaresma, Boris Shishkov, José Cordeiro (Eds.): ICSOFT 2011 - Proceedings of the 6<sup>th</sup> International Conference on Software and Data Technologies, Volume 2, Seville, Spain, 18-21 July, 2011. SciTePress 2011, ISBN 978-989-8425-77-5
27. José A. Moinhos Cordeiro, Boris Shishkov, Alexander Verbraeck, Markus Helfert (Eds.): CSEDU 2010 - Proceedings of the Second International Conference on Computer Supported Education, Valencia, Spain, April 7-10, 2010 - Volume 1. INSTICC Press 2010, ISBN 978-989-674-023-8
28. José A. Moinhos Cordeiro, Boris Shishkov, Alexander Verbraeck, Markus Helfert (Eds.): CSEDU 2010 - Proceedings of the Second International Conference on Computer Supported Education, Valencia, Spain, April 7-10, 2010 - Volume 2. INSTICC Press 2010, ISBN 978-989-674-024-5
29. David A. Marca, Boris Shishkov, Marten van Sinderen (Eds.): ICE-B 2010 - Proceedings of the International Conference on e-Business, Athens, Greece, July 26 - 28, 2010, ICE-B is part of ICETE - The International Joint Conference on e-Business and Telecommunications. SciTePress 2010, ISBN 978-989-8425-17-1
30. José A. Moinhos Cordeiro, Maria Virvou, Boris Shishkov (Eds.): ICSOFT 2010 - Proceedings of the Fifth International Conference on Software and Data Technologies, Volume 1, Athens, Greece, July 22-24, 2010. SciTePress 2010, ISBN 978-989-8425-22-5
31. José A. Moinhos Cordeiro, Maria Virvou, Boris Shishkov (Eds.): ICSOFT 2010 - Proceedings of the Fifth International Conference on Software and Data Technologies, Volume 2, Athens, Greece, July 22-24, 2010. SciTePress 2010, ISBN 978-989-8425-23-2
32. Boris Shishkov, George A. Tsihrantzis, Maria Virvou (Eds.): INNOV 2010 - Proceedings of the First International Conference on Innovative Developments in ICT, Athens, Greece, July 29-31, 2010. SciTePress 2010, ISBN 978-989-8425-15-7
33. José A. Moinhos Cordeiro, Boris Shishkov, Alexander Verbraeck, Markus Helfert (Eds.): CSEDU 2009 - Proceedings of the First International Conference on Computer Supported Education, Lisboa, Portugal, March 23-26, 2009 - Volume 1. INSTICC Press 2009, ISBN 978-989-8111-82-1
34. José A. Moinhos Cordeiro, Boris Shishkov, Alexander Verbraeck, Markus Helfert (Eds.): CSEDU 2009 - Proceedings of the First International Conference on Computer Supported Education, Lisboa, Portugal, March 23-26, 2009 - Volume 2. INSTICC Press 2009, ISBN 978-989-8111-82-1

35. Joaquim Filipe, David A. Marca, Boris Shishkov, Marten van Sinderen (Eds.): ICE-B 2009 - Proc.: Int. Conference on e-Business, Milan, Italy, July 7-10, 2009, ICE-B is part of ICETE - The International Joint Conference on e-Business and Telecommunications. INSTICC Press 2009, ISBN 978-989-674-006-1
36. Boris Shishkov, José Cordeiro, Alpesh Ranchordas (Eds.): ICSOFT 2009 - Proceedings of the 4<sup>th</sup> International Conference on Software and Data Technologies, Volume 1, Sofia, Bulgaria, July 26-29, 2009. INSTICC Press 2009, ISBN 978-989-674-009-2
37. Boris Shishkov, José Cordeiro, Alpesh Ranchordas (Eds.): ICSOFT 2009 - Proceedings of the 4<sup>th</sup> International Conference on Software and Data Technologies, Volume 2, Sofia, Bulgaria, July 26-29, 2009. INSTICC Press 2009, ISBN 978-989-674-010-8
38. Joaquim Filipe, David A. Marca, Boris Shishkov, Marten van Sinderen (Eds.): ICE-B 2008 - Proc.: Int. Conference on e-Business, Porto, Portugal, July 26-29, 2008, ICE-B is part of ICETE - The International Joint Conference on e-Business and Telecommunications. INSTICC Press 2008, ISBN 978-989-8111-58-6
39. José Cordeiro, Boris Shishkov, Alpesh Ranchordas, Markus Helfert (Eds.): ICSOFT 2008 - Proceedings of the Third International Conference on Software and Data Technologies, Volume PL/DPS/KE, Porto, Portugal, July 5-8, 2008. INSTICC Press 2008, ISBN 978-989-8111-51-7
40. José Cordeiro, Boris Shishkov, Alpesh Ranchordas, Markus Helfert (Eds.): ICSOFT 2008 - Proceedings of the Third International Conference on Software and Data Technologies, Volume SE/MUSE/GSDCA, Porto, Portugal, July 5-8, 2008. INSTICC Press 2008, ISBN 978-989-8111-52-4
41. José Cordeiro, Boris Shishkov, Alpesh Ranchordas, Markus Helfert (Eds.): ICSOFT 2008 - Proceedings of the Third International Conference on Software and Data Technologies, Volume ISDM/ABF, Porto, Portugal, July 5-8, 2008. INSTICC Press 2008, ISBN 978-989-8111-53-1
42. Dimitri Konstantas, Boris Shishkov (Eds.): EHST 2008 - Proceedings of the 2<sup>nd</sup> International Workshop on e-Health Services and Technologies, Porto, Portugal, July 5-8, 2008. INSTICC Press 2008, ISBN 978-989-8111-56-2
43. Joaquim Filipe, David A. Marca, Boris Shishkov, Marten van Sinderen (Eds.): ICE-B 2007 - Proceedings of the International Conference on e-Business, Barcelona, Spain, July 28-31, 2007, ICE-B is part of ICETE - The International Joint Conference on e-Business and Telecommunications. INSTICC Press 2007, ISBN 978-989-8111-11-1
44. Joaquim Filipe, Boris Shishkov, Markus Helfert (Eds.): ICSOFT 2007, Proceedings of the Second International Conference on Software and Data Technologies, Volume PL/DPS/KE/MUSE, Barcelona, Spain, July 22-25, 2007. INSTICC Press 2007, ISBN 978-989-8111-05-0
45. Joaquim Filipe, Boris Shishkov, Markus Helfert (Eds.): ICSOFT 2007, Proceedings of the Second International Conference on Software and Data Technologies, Volume SE, Barcelona, Spain, July 22-25, 2007. INSTICC Press 2007, ISBN 978-989-8111-06-7
46. Joaquim Filipe, Boris Shishkov, Markus Helfert (Eds.): ICSOFT 2007, Proceedings of the Second International Conference on Software and Data Technologies, Volume ISDM/EHST/DC, Barcelona, Spain, July 22-25, 2007. INSTICC Press 2007, ISBN 978-989-8111-07-4

47. Joaquim Filipe, Boris Shishkov, Markus Helfert (Eds.): ICSOFT 2006, First Int. Conf. on Software and Data Technologies, Setúbal, Portugal, September 11-14, 2006. INSTICC Press 2006, ISBN 972-8865-69-4

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## 12. Conference Organization

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1.	Conference / symposium:	International Symposium on Business Modeling and Software Design	
	Acronym and edition:	BMSD 2018, 8 <sup>th</sup> edition (Vienna, Austria)	
	Role of Dr. Boris Shishkov:	Chair (General Chair + Program Chair)	<a href="http://www.is-bmsd.org">www.is-bmsd.org</a>
2.	Conference / symposium:	International Symposium on Business Modeling and Software Design	
	Acronym and edition:	BMSD 2017, 7 <sup>th</sup> edition (Barcelona, Spain)	
	Role of Dr. Boris Shishkov:	Chair (General Chair + Program Chair)	<a href="http://www.is-bmsd.org">www.is-bmsd.org</a>
3.	Conference / symposium:	International Symposium on Business Modeling and Software Design	
	Acronym and edition:	BMSD 2016, 6 <sup>th</sup> edition (Rhodes, Greece)	
	Role of Dr. Boris Shishkov:	Chair (General Chair + Program Chair)	<a href="http://www.is-bmsd.org">www.is-bmsd.org</a>
4.	Conference / symposium:	International Symposium on Business Modeling and Software Design	
	Acronym and edition:	BMSD 2015, 5 <sup>th</sup> edition (Milan, Italy)	
	Role of Dr. Boris Shishkov:	Chair (General Chair + Program Chair)	<a href="http://www.is-bmsd.org">www.is-bmsd.org</a>
5.	Conference / symposium:	International Symposium on Business Modeling and Software Design	
	Acronym and edition:	BMSD 2014, 4 <sup>th</sup> edition (Luxembourg, Grand Duchy of Luxembourg)	
	Role of Dr. Boris Shishkov:	Chair (General Chair + Program Chair)	<a href="http://www.is-bmsd.org">www.is-bmsd.org</a>
6.	Conference / symposium:	International Symposium on Business Modeling and Software Design	
	Acronym and edition:	BMSD 2013, 3 <sup>rd</sup> edition (Noordwijkerhout, The Netherlands)	
	Role of Dr. Boris Shishkov:	Chair (General Chair + Program Chair)	<a href="http://www.is-bmsd.org">www.is-bmsd.org</a>
7.	Conference / symposium:	International Symposium on Business Modeling and Software Design	
	Acronym and edition:	BMSD 2012, 2 <sup>nd</sup> edition (Geneva, Switzerland)	
	Role of Dr. Boris Shishkov:	Chair (General Chair + Program Chair)	<a href="http://www.is-bmsd.org">www.is-bmsd.org</a>

8.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Symposium on Business Modeling and Software Design BMSD 2011, 1 <sup>st</sup> edition (Sofia, Bulgaria) Chair (General Chair + Program Chair)	<a href="http://www.is-bmsd.org">www.is-bmsd.org</a>
9.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on Software and Data Technologies ICSOFT 2011, 6 <sup>th</sup> edition (Seville, Spain) Program Chair	<a href="http://www.icsoft.org">www.icsoft.org</a>
10.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on Software and Data Technologies ICSOFT 2010, 5 <sup>th</sup> edition (Athens, Greece) Program Chair	<a href="http://www.icsoft.org">www.icsoft.org</a>
11.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on Software and Data Technologies ICSOFT 2009, 4 <sup>th</sup> edition (Sofia, Bulgaria) Program Chair	<a href="http://www.icsoft.org">www.icsoft.org</a>
12.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on Software and Data Technologies ICSOFT 2008, 3 <sup>rd</sup> edition (Porto, Portugal) Program Co-Chair	<a href="http://www.icsoft.org">www.icsoft.org</a>
13.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on Software and Data Technologies ICSOFT 2007, 2 <sup>nd</sup> edition (Barcelona, Spain) Program Co-Chair	<a href="http://www.icsoft.org">www.icsoft.org</a>
14.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on Software and Data Technologies ICSOFT 2006, 1 <sup>st</sup> edition (Setúbal, Portugal) Program Co-Chair	<a href="http://www.icsoft.org">www.icsoft.org</a>
15.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on e-Business ICE-B 2011, '11 edition (Seville, Spain) Program Co-Chair	<a href="http://www.ice-b.icete.org">www.ice-b.icete.org</a>
16.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on e-Business ICE-B 2010, '10 edition (Athens, Greece) Program Co-Chair	<a href="http://www.ice-b.icete.org">www.ice-b.icete.org</a>
17.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on e-Business ICE-B 2009, '09 edition (Milan, Italy) Program Co-Chair	<a href="http://www.ice-b.icete.org">www.ice-b.icete.org</a>



18.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on e-Business ICE-B 2008, '08 edition (Porto, Portugal) Program Co-Chair	<a href="http://www.ice-b.icete.org">www.ice-b.icete.org</a>
19.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on e-Business ICE-B 2007, '07 edition (Barcelona, Spain) Program Co-Chair	<a href="http://www.ice-b.icete.org">www.ice-b.icete.org</a>
20.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on Innovative Developments in ICT INNOV 2011, 2 <sup>nd</sup> edition (Sofia, Bulgaria) Chair (General Chair + Program Chair)	<a href="http://www.scitepress.org">www.scitepress.org</a>
21.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on Innovative Developments in ICT INNOV 2010, 1 <sup>st</sup> edition (Athens, Greece) Program Co-Chair	<a href="http://www.scitepress.org">www.scitepress.org</a>
22.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on Telecommunications and Remote Sensing ICTRS 2018, 7 <sup>th</sup> edition (Barcelona, Spain) General Co-Chair	<a href="http://www.scitepress.org">www.scitepress.org</a>
23.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on Telecommunications and Remote Sensing ICTRS 2017, 6 <sup>th</sup> edition (Delft, The Netherlands) General Co-Chair	<a href="http://www.ictrs.org">www.ictrs.org</a>
24.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on Telecommunications and Remote Sensing ICTRS 2016, 5 <sup>th</sup> edition (Milan, Italy) General Chair	<a href="http://www.ictrs.org">www.ictrs.org</a>
25.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on Telecommunications and Remote Sensing ICTRS 2015, 4 <sup>th</sup> edition (Rhodes, Greece) General Co-Chair	<a href="http://www.ictrs.org">www.ictrs.org</a>
26.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Workshop on e-Health Services and Technologies EHST 2012, 6 <sup>th</sup> edition (Geneva, Switzerland) Chair (General Chair + Program Chair)	<a href="http://www.is-ehst.org">www.is-ehst.org</a>
27.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Workshop on e-Health Services and Technologies EHST 2009, 3 <sup>rd</sup> edition (Sofia, Bulgaria) Co-Chair (General Chair + Program Chair)	<a href="http://www.is-ehst.org">www.is-ehst.org</a>

28.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Workshop on e-Health Services and Technologies EHST 2008, 2 <sup>nd</sup> edition (Porto, Portugal) Co-Chair (General Chair + Program Chair)	<a href="http://www.is-ehst.org">www.is-ehst.org</a>
29.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Workshop on e-Health Services and Technologies EHST 2007, 1 <sup>st</sup> edition (Barcelona, Spain) Co-Chair (General Chair + Program Chair)	<a href="http://www.is-ehst.org">www.is-ehst.org</a>
30.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	Int. Workshop. Future Internet Applications for Traffic Surveillance & Mngmt. FIATS-M 2011, 1 <sup>st</sup> edition (Sofia, Bulgaria) Chair (General Chair + Program Chair)	<a href="http://www.fiats-m.org">www.fiats-m.org</a>
31.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on Computer Supported Education CSEDU 2011, 3 <sup>rd</sup> edition (Noordwijkerhout, The Netherlands) General Co-Chair	<a href="http://www.csedu.org">www.csedu.org</a>
32.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on Computer Supported Education CSEDU 2010, 2 <sup>nd</sup> edition (Valencia, Spain) General Co-Chair	<a href="http://www.csedu.org">www.csedu.org</a>
33.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on Computer Supported Education CSEDU 2009, 1 <sup>st</sup> edition (Lisbon, Portugal) General Co-Chair	<a href="http://www.csedu.org">www.csedu.org</a>
34.	Conference / symposium: Acronym and edition: Role of Dr. Boris Shishkov:	International Conference on Cloud Computing and Services Science CLOSER 2011, 1 <sup>st</sup> edition (Noordwijkerhout, The Netherlands) General Chair	<a href="http://closer.scitevents.org">closer.scitevents.org</a>

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## 13. R&D Projects

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**Dr. Boris Shishkov** has participated in different R&D projects, fulfilling different roles:

1.

**Project:** **DP-ICC: Delft Pilot - International Criminal Court** – innovative solutions concerning the IT architecture of the International Criminal Court

**Year:** **2017**

**Funding:** Municipality of The Hague, The Netherlands

**Role of Dr. Boris Shishkov:** **Researcher**

**Brief description:** The DP-ICC project addresses the IT architecture of the International Criminal Court (situated in The Hague), and in particular – the need to consider PUBLIC VALUES in this context, values such as transparency, privacy, and so on. Actually, those values are essentially non-functional while the realization of an IT architecture is mostly functional. Hence, a key DP-ICC challenge is reflecting such values in corresponding functional IT solutions. The proposed approach is featuring patterns; in particular, generic patterns are identified, matching corresponding value types. Hence, when it is needed to “incorporate” a particular value type, the corresponding generic pattern could be parameterized accordingly (as per the particular needs). Further, another kind of patterns are considered as well; those patterns are about resolving value conflicts – when it is impossible to fulfill two or more values at the same time. Those ideas are proposed with regard to the latest developments concerning the current IT architecture of the International Criminal Court.

2.

**Project:** **FP7 FRACTALS: Future Internet Enabled Agricultural Applications**

**Year:** **2015**

**Funding:** EU

**Role of Dr. Boris Shishkov:** **Evaluator**

**Brief description:** The FRACTALS project aims at supporting innovative agricultural SMEs that are interested in utilizing current information and communication technologies, for the sake of achieving better efficiency and higher quality with regard to their activities. For this, FRACTALS establishes itself upon the FIWARE open platform which offers numerous interfaces facilitating the development of intelligent applications. In this way, the users can develop “licenseless” software applications facilitating different areas and those applications in turn could be integrated with the current IT infrastructures. That is how the FRACTALS project generates ideas about concrete FIWARE-compatible solutions concerning agriculture.

3.

**Project:** **FP7 CONcORDE: Development of Coordination Mechanisms During Different Kinds of Emergencies**

**Year:** **2015**

**Funding:** EU

**Role of Dr. Boris Shishkov:** **Consultant**

**Brief description:** Stressing upon the role of current information and communication technologies, the CONcORDE project considers the emergency delivery experience in different countries, especially as it concerns healthcare services, including their provision "on the field". On that basis, a general conceptual model is identified, featuring the provision of emergency healthcare services and also different scenario types are proposed, corresponding to particular situations – an emergency healthcare situation, a terrorist attack situation, a situation on the field, and so on. For a particular scenario, the conceptual model is extended accordingly, and specific issues are analyzed. CONcORDE analyzes the relevant roles (for example: medical doctor, dispatcher, chauffeur, and so on) and corresponding action types (for example: movement towards the person in need, establishment of his or her condition, first aid delivery, and so on). In this, the roles and action types are considered not only in general but also in the context of a particular scenario. The CONcORDE project is challenged to research how such an emergency healthcare system could quickly and effectively adapt to the situation at hand (represented by a scenario). The result represents a conceptual model featuring the flexible and adaptive delivery of emergency healthcare services.

4.

**Project:** **Li-La (Library of Labs): Portal-Based Access to Virtual Labs and Remote Experiments**

**Years:** **2009, 2010, 2011**

**Funding:** EU

**Role of Dr. Boris Shishkov:** **Researcher**

**Brief description:** The Li-La project offers innovative ideas concerning the realization of remote experiments, built upon the use of portal-based access to virtual labs. This is expected to benefit natural science departments in different European universities (and other institutions) because there are many natural science labs in Europe, that cannot afford purchasing expensive equipment for different experiments. Hence, accessing a distant lab where such equipment is available would be of use; some labs have equipment suitable for some experiments, other labs have equipment suitable for other experiments – indeed, allowing researchers to "share" labs would facilitate the scientific work. This could be realized using Internet-based software systems, such that for example: a student at TU Berlin could distantly carry out experiments in a lab in Amsterdam. For this to happen, it is necessary to algorithmize the experiment process such that it is possible for the user to trigger and control the experiment distantly, counting on corresponding software. Further, the software system should allow for an adequate presentation and

visualization of the experiment results. Finally, the system should be capable of adequately providing the corresponding access control mechanisms. As an interdisciplinary project, Li-La brings together natural sciences experts (who have the right attitude towards the experiments) and enterprise / software engineering experts (who have the responsibility of system modeling (and development), and related to this – the enabling, coordination, visualization, and access management with regard to the experiments). Li-La delivers such a software model and develops prototypes featuring several experiments.

5.

**Project: AOSD: Aspect-Oriented Software Development**  
**Years: 2007, 2008**  
**Funding: EU**  
**Role of Dr. Boris Shishkov: Researcher**  
**Brief description:** The AOSD project focuses on Non-Functional Requirements (NFR), in general, and on the so called “aspects”, in particular, considering a software system being developed – then aspects, such as recoverability, privacy, etc. are of importance. Such aspects can be localized in a particular module even though they are in principle crosscutting. Hence, it is a challenge considering them adequately within the conceptual software development; that is why they are often considered intuitively by programmers at low level. The AOSD project aims at a better conceptualization of aspects, such that they can be effectively addressed still at the design level – this would allow for more “predictable” software. This is a matter of model transformations and functional solutions: (i) Model transformations are important for the sake of achieving traceability of aspects (from programming through architecture to design and vice versa); (ii) It is often needed to address functionally particular aspects. This all is reflected in the AOSD architecture.

6.

**Project: A-MUSE: Architectural Modeling for Service Enabling**  
**Year: 2006**  
**Funding: The Netherlands**  
**Role of Dr. Boris Shishkov: Researcher**  
**Brief description:** The A-MUSE project addresses interactive systems, taking conceptual and architecture perspectives, and considering Service-Oriented Architectures – SOA and Model-Driven Engineering – MDE. In particular A-MUSE focuses on the modeling and design of software services / web services. On the one hand, they are realized by corresponding software components or applications that are in turn developed by software engineers; on the other hand, those services are utilized by users who are not supposed to have deep technical knowledge. This allows for a wide societal applicability of software applications. Still, in order to achieve it, a coordination is needed with regard to the (simultaneous) use of many inter-related software services, for example service orchestration or service choreography. The A-MUSE project considers not only software services (and the corresponding coordination among them) but also their underlying real-life processes.

7.

**Project:** **AWARENESS: Context-aware Mobile Networks and Services**

**Year:** **2005**

**Funding:** The Netherlands

**Role of Dr. Boris Shishkov:** **Researcher**

**Brief description:** The AWARENESS project has delivered a conceptual vision and architecture featuring context-aware mobile middleware (between the software applications and the operation system) applications in the healthcare domain. Also, AWARENESS delivers a distant healthcare monitoring prototype, facilitated by so called BAN (Body Area Network) vital-sign sensors capturing pulse, blood pressure, and so on. Those sensors are attached to the user's body and are connected to a mobile device that the user carries with him/her. That device is processing the incoming data and by applying algorithms, it is capable of predicting (making a high-probability prognosis) an oncoming change in the situation of the user (for example, an epileptic seizure). Supported by the BAN, the AWARENESS system can orchestrate and coordinate complex organizational and technical processes as well as the corresponding data exchange; this all concerning the "connection" between the user (who may possibly need medical help) and the hospital (who would have to deliver such help), and/or third parties, such as mobile first aid deliverers, ambulances, relatives of the user, and so on. Hence, the mobile device enables the user's connection as it concerns his or her health condition and the environment. The project AWARENESS is considered highly innovative for the 2005-2006 period, much before the appearance of the "Internet-of-Things" notion and for this reason, it is not surprising that the AWARENESS achievements have inspired other research projects, development initiatives, and scientific papers.

8.

**Project:** **BETADE: Re-usable Business Engineering Building Blocks**

**Years:** **2001, 2002, 2003, 2004**

**Funding:** The Netherlands

**Role of Dr. Boris Shishkov:** **Researcher**

**Brief description:** The BETADE project addresses a software development that stems from underlying generic business engineering building blocks that are in turn reflected in corresponding enterprise models. Actually, developing an information system assumes: (a) the automation of real-life processes, by means of the development of software; (b) the adequate alignment of those processes with the other processes (that are not undergoing automation); (c) the integration of all those processes in the context of their overall environment. Hence, the development of information systems should be based on enterprise models since it is the enterprise models that reflect the real-life processes which in turn are the basis on

which the information system is designed. This is nevertheless a non-trivial task since enterprise modeling and software specification point to different disciplines (Organizational Modeling and Informatics) and are based on different formalisms. In the BETADE project, generic business engineering building blocks are identified, expected to be widely reusable, and it is studied how they can usefully support the corresponding development of software.

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## 14. Publications

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Dr. Boris Shishkov published over 60 peer-reviewed research papers and his current SCOPUS h-index is 6:

- 1. Vehicle Navigation in Urban Environments: Overcoming GPS Shadows**  
Authors: Ivan Garvanov, Christo Kabakchiev, Boris Shishkov, Magdalena Garvanova  
Publ. in: Proceedings of ICTRS 2018 – the 7<sup>th</sup> International Conference on Telecommunications and Remote Sensing; 8-9 October 2018; Barcelona, Spain  
Publisher: ACM  
Year: 2018
- 2. Mobile Devices: Effect on Human Health**  
Authors: Magdalena Garvanova, Boris Shishkov, Stoyan Vladimirov  
Publ. in: Proceedings of ICTRS 2018 – the 7<sup>th</sup> International Conference on Telecommunications and Remote Sensing; 8-9 October 2018; Barcelona, Spain  
Publisher: ACM  
Year: 2018
- 3. Three Categories of Context-Aware Systems**  
Authors: Boris Shishkov, John Bruntse, Martijn Warnier, Marijn Janssen  
Publ. in: Proceedings of BMSD 2018 – the 8<sup>th</sup> International Symposium on Business Modeling and Software Design; 2-4 July 2018; Vienna, Austria  
Publisher: Springer, Cham  
Year: 2018
- 4. Business Process Variability and Public Values**  
Authors: Boris Shishkov, Jan Mendling  
Publ. in: Proceedings of BMSD 2018 – the 8<sup>th</sup> International Symposium on Business Modeling and Software Design; 2-4 July 2018; Vienna, Austria  
Publisher: Springer, Cham  
Year: 2018

5. **Composite Public Values and Software Specifications**  
 Authors: Magdalena Garvanova, Boris Shishkov, Marijn Janssen  
 Publ. in: Proceedings of BMSD 2018 – the 8<sup>th</sup> International Symposium on Business Modeling and Software Design; 2-4 July 2018; Vienna, Austria  
 Publisher: Springer, Cham  
 Year: 2018
  
6. **Towards Resilience in the Provisioning of IT Services for IoT Applications, Context-Aware Road Traffic Navigation in Smart Cities**  
 Authors: Ivan Garvanov, Christo Kabakchiev, Boris Shishkov, Magdalena Garvanova  
 Publ. in: Proceedings of BMSD 2018 – the 8<sup>th</sup> International Symposium on Business Modeling and Software Design; 2-4 July 2018; Vienna, Austria  
 Publisher: Springer, Cham  
 Year: 2018
  
7. **Enforcing Context-Awareness and Privacy-by-Design in the Specification of Information Systems**  
 Authors: Boris Shishkov, Marijn Janssen  
 Publ. in: Lecture Notes in Business Information Processing (LNBIP) Series – LNBIP 309: Revised Selected Papers from BMSD 2017 – the 7<sup>th</sup> International Symposium on Business Modeling and Software Design; 3-5 July 2017; Barcelona, Spain  
 Publisher: Springer, Cham  
 Year: 2018
  
8. **Drones in Land Border Missions: Benefits and Accountability Concerns**  
 Authors: Boris Shishkov, Stefan Hristozov, Marijn Janssen, Jeroen van den Hoven  
 Publ. in: Proceedings of ICTRS 2017 – the 6<sup>th</sup> International Conference on Telecommunications and Remote Sensing; 6-7 November 2017; Delft, The Netherlands  
 Publisher: ACM  
 Year: 2017
  
9. **Towards Context-Aware and Privacy-Sensitive Systems**  
 Authors: Boris Shishkov, Marijn Janssen, Yi Yin  
 Publ. in: Proceedings of BMSD 2017 – the 7<sup>th</sup> International Symposium on Business Modeling and Software Design; 3-5 July 2017; Barcelona, Spain  
 Publisher: SCITEPRESS  
 Year: 2017
  
10. **Usability Assessment of Drone Technology With Regard to Land Border Security**  
 Authors: Stefan Hristozov, Boris Shishkov  
 Publ. in: Proceedings of BMSD 2017 – the 7<sup>th</sup> International Symposium on Business Modeling and Software Design; 3-5 July 2017; Barcelona, Spain  
 Publisher: SCITEPRESS  
 Year: 2017
  
11. **Towards Context-aware Border Security Control**  
 Authors: Boris Shishkov, Dimitris Mitrakos  
 Publ. in: Proceedings of BMSD 2016 – the 6<sup>th</sup> International Symposium on Business Modeling and Software Design; 20-22 June 2016; Rhodes, Greece  
 Publisher: SCITEPRESS  
 Year: 2016



12. **Towards a Service-Oriented Architecture for eVoting**  
 Authors: Boris Shishkov, Marijn Janssen  
 Publ. in: Proceedings of BMSD 2016 – the 6<sup>th</sup> International Symposium on Business Modeling and Software Design; 20-22 June 2016; Rhodes, Greece  
 Publisher: SCITEPRESS  
 Year: 2016
  
13. **Digitization of Cultural Heritage – A Service-Oriented Approach**  
 Authors: Boris Shishkov  
 Publ. in: Proceedings of DiPP 2016 – the 6<sup>th</sup> Int. Conf. on Digital Presentation and Preservation of Cultural and Scientific Heritage; 26-28 September 2016; Veliko Tarnovo, Bulgaria  
 Publisher: Institute of Mathematics and Informatics - Bulgarian Academy of Sciences  
 Year: 2016
  
14. **SDBC-Based Technology-Independent Functionality Models (Applications in Emergency Medical Response)**  
 Authors: Boris Shishkov  
 Publ. in: Proceedings of the National Conference on Informatics in Memory of P. Burnev; 12-13 November 2015; Sofia, Bulgaria  
 Publisher: Institute of Mathematics and Informatics - Bulgarian Academy of Sciences  
 Year: 2015
  
15. **Business Models and Service Applications for Traffic Management**  
 Authors: Brahmananda Sapkota, Marten van Sinderen, Boris Shishkov  
 Publ. in: Proceedings of BMSD 2012 – the 2<sup>nd</sup> International Symposium on Business Modeling and Software Design; 4-6 July 2012; Geneva, Switzerland  
 Publisher: SCITEPRESS  
 Year: 2012
  
16. **e- Business Challenges and Directions: Important Themes from the First ICE-B Workshop**  
 Authors: David Marca, Rebecca Bulander, Cornelia Kruslin, Boris Shishkov, Marten v. Sinderen  
 Publ. in: Communications in Computer and Information Science (CCIS) Series – CCIS 222: Revised Selected Papers from ICETE 2010 – the 7<sup>th</sup> Int. Joint Conf. on e-Business and Telecommunications; 26-28 July 2010; Athens, Greece  
 Publisher: Springer-Verlag  
 Year: 2012
  
17. **Technology-Independent Functionality Models for Road Traffic Systems**  
 Authors: Boris Shishkov  
 Publ. in: Proceedings of FIATS-M 2011 – the 1<sup>st</sup> Int. Workshop on Future Internet Applications for Traffic Surveillance and Management; 27-28 October 2011; Sofia, Bulgaria  
 Publisher: SCITEPRESS  
 Year: 2011
  
18. **On the Application of Autonomic and Context-aware Computing to Support Home Energy Management**  
 Authors: Boris Shishkov, Martijn Warnier, Marten van Sinderen  
 Publ. in: Proceedings of ICEIS 2010 – the 12<sup>th</sup> International Conference on Enterprise Information Systems; 8-12 June 2010; Funchal, Portugal  
 Publisher: SCITEPRESS  
 Year: 2010

19. **Employees' Upskilling through Service-oriented Learning Environments**  
 Authors: Boris Shishkov, Marten van Sinderen, Roberto Cavalcante  
 Publ. in: Proceedings of ICEIS 2010 – the 12<sup>th</sup> International Conference on Enterprise Information Systems; 8-12 June 2010; Funchal, Portugal  
 Publisher: SCITEPRESS  
 Year: 2010
  
20. **Methodological Support for the Design of Enterprise Information Systems with SDBS: Towards Distributed, Service-Oriented, and Context-Aware Solutions**  
 Authors: Boris Shishkov  
 Publ. in: Proceedings of I-WEST 2010 – the 4<sup>th</sup> International Workshop on Enterprise Systems and Technology; 24-25 July 2010; Athens, Greece  
 Publisher: SCITEPRESS  
 Year: 2010
  
21. **Service-Oriented Architecture for Household Energy Management**  
 Authors: Marten van Sinderen, Martijn Warnier, Boris Shishkov  
 Publ. in: Proceedings of I-WEST 2010 – the 4<sup>th</sup> International Workshop on Enterprise Systems and Technology; 24-25 July 2010; Athens, Greece  
 Publisher: SCITEPRESS  
 Year: 2010
  
22. **Towards Flexible Inter-enterprise Collaboration: A Supply Chain Perspective**  
 Authors: Boris Shishkov, Marten van Sinderen, Alexander Verbraeck  
 Publ. in: Proceedings of ICEIS 2009 – the 11<sup>th</sup> International Conference on Enterprise Information Systems; 6-10 May 2009; Milan, Italy  
 Publisher: Springer-Verlag  
 Year: 2009
  
23. **Enhancing Context Analysis with Intelligence in Providing e-Health Services - Less Infrastructure Dependency in Supporting Cardio-vascular Patients**  
 Authors: Boris Shishkov, Alexander Verbraeck, Ing Widya  
 Publ. in: Proceedings of ICISOFT 2009 – the 4<sup>th</sup> International Conference on Software and Data Technologies; 26-29 July 2009; Sofia, Bulgaria  
 Publisher: SCITEPRESS  
 Year: 2009
  
24. **Service-Oriented Coordination Platform for Technology-Enhanced Learning**  
 Authors: Boris Shishkov, Marten van Sinderen  
 Publ. in: Proceedings of I-WEST 2009 – the 3<sup>rd</sup> International Workshop on Enterprise Systems and Technology; 29-30 July 2009; Sofia, Bulgaria  
 Publisher: SCITEPRESS  
 Year: 2009
  
25. **Norm Analysis Supporting the Design of Context-Aware Applications**  
 Authors: Boris Shishkov, Marten van Sinderen, Kecheng Liu, Hui Du  
 Publ. in: Proceedings of ICEIS 2008 – the 10<sup>th</sup> International Conference on Enterprise Information Systems; 12-16 June 2008; Barcelona, Spain  
 Publisher: SCITEPRESS  
 Year: 2008

26. **Towards a Norm-Driven Design of Context-Aware e-Health Applications**  
 Authors: Boris Shishkov, Hailiang Mei, Marten van Sinderen, Thijs Tonis  
 Publ. in: Proceedings of EHST 2008 – the 2<sup>nd</sup> International Workshop on e-Health Services and Technologies; 7 July 2008; Porto, Portugal  
 Publisher: SCITEPRESS  
 Year: 2008
27. **On the Design of Context-Aware Applications**  
 Authors: Boris Shishkov, Marten van Sinderen  
 Publ. in: Proceedings of I-WEST 2008 – the 2<sup>nd</sup> International Workshop on Enterprise Systems and Technology; 23 May 2008; Enschede, The Netherlands  
 Publisher: SCITEPRESS  
 Year: 2008
28. **From User Context States to Context-Aware Applications**  
 Authors: Boris Shishkov, Marten van Sinderen  
 Publ. in: Lecture Notes in Business Information Processing (LNBIP) Series – LNBIP 12: Revised Selected Papers from ICEIS 2007 – the 9<sup>th</sup> International Conference on Enterprise Information Systems; 12-16 June 2007; Funchal, Portugal  
 Publisher: Springer-Verlag  
 Year: 2008
29. **Combining SDBC and ISDL in the Modeling and Refinement of Business Processes**  
 Authors: Boris Shishkov, Dick A.C. Quartel  
 Publ. in: Lecture Notes in Business Information Processing (LNBIP) Series – LNBIP 3: Revised Selected Papers from ICEIS 2006 – the 8<sup>th</sup> International Conference on Enterprise Information Systems; 23-27 May 2006; Paphos, Cyprus  
 Publisher: Springer-Verlag  
 Year: 2008
30. **Model-Driven Design of Context-Aware Applications**  
 Authors: Boris Shishkov, Marten van Sinderen, Bedir Tekinerdogan  
 Publ. in: Proceedings of ICEBE 2007 – IEEE International Conference on e-Business Engineering; 24-26 October 2007; Hong Kong, China  
 Publisher: IEEE Computer Society  
 Year: 2007
31. **Model-Driven Design of Context-Aware Applications**  
 Authors: Boris Shishkov, Marten van Sinderen  
 Publ. in: Proceedings of ICEIS 2007 – the 9<sup>th</sup> International Conference on Enterprise Information Systems; 12-16 June 2007; Funchal, Portugal  
 Publisher: SCITEPRESS  
 Year: 2007
32. **Closing the Business-Application Gap in SOA - Challenges and Solution Directions**  
 Authors: Boris Shishkov, Jan L.G. Dietz, Marten van Sinderen  
 Publ. in: Proceedings of ICSOFT 2007 – the 2<sup>nd</sup> International Conference on Software and Data Technologies; 22-25 July 2007; Barcelona, Spain  
 Publisher: SCITEPRESS  
 Year: 2007

33. **E-Health Services and Technologies - The Way Ahead**  
 Authors: Boris Shishkov, Dimitri Konstantas, Joaquim Filipe  
 Publ. in: Proceedings of EHST 2007 – the 1<sup>st</sup> International Workshop on e-Health Services and Technologies; 22 July 2007; Barcelona, Spain  
 Publisher: SCITEPRESS  
 Year: 2007
34. **A Framework for Smart Distribution of Bio-Signal Processing Units in M-Health**  
 Authors: H. Mei, I. Widya, T. Broens, P. Pawar, A. van Halteren, B. Shishkov, M. van Sinderen  
 Publ. in: Proceedings of EHST 2007 – the 1<sup>st</sup> International Workshop on e-Health Services and Technologies; 22 July 2007; Barcelona, Spain  
 Publisher: SCITEPRESS  
 Year: 2007
35. **SOA-Driven Business-Software Alignment**  
 Authors: Boris Shishkov, Marten van Sinderen, Dick A.C. Quartel  
 Publ. in: Proceedings of ICEBE 2006 – IEEE International Conference on e-Business Engineering; 24-26 October 2006; Shanghai, China  
 Publisher: IEEE Computer Society  
 Year: 2006
36. **Bridging the Language-Action Perspective and Organizational Semiotics in SDBC**  
 Authors: Boris Shishkov, Jan L.G. Dietz, Kecheng Liu  
 Publ. in: Proceedings of ICEIS 2006 – the 8<sup>th</sup> International Conference on Enterprise Information Systems; 23-27 May 2006; Paphos, Cyprus  
 Publisher: SCITEPRESS  
 Year: 2006
37. **Refinement of SDBC Business Process Models Using ISDL**  
 Authors: Boris Shishkov, Dick A.C. Quartel  
 Publ. in: Proceedings of ICEIS 2006 – the 8<sup>th</sup> International Conference on Enterprise Information Systems; 23-27 May 2006; Paphos, Cyprus  
 Publisher: SCITEPRESS  
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38. **Applying Component-Based UML-Driven Conceptual Modeling in SDBC**  
 Authors: Boris Shishkov, Jan L.G. Dietz  
 Publ. in: Proceedings of ICEIS 2005 – the 7<sup>th</sup> International Conference on Enterprise Information Systems; 24-28 May 2005; Miami, Florida, USA  
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39. **Applying SDBC in the Cultural-Heritage Sector**  
 Authors: Boris Shishkov, Jan L.G. Dietz  
 Publ. in: Proceedings of ICEIS 2005 – the 7<sup>th</sup> International Conference on Enterprise Information Systems; 24-28 May 2005; Miami, Florida, USA  
 Publisher: SCITEPRESS  
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40. **Designing Cultural Heritage Sector Brokers Using SDBC**  
 Authors: Boris Shishkov  
 Publ. in: *International Journal “Information Theories & Applications”* (IJ ITA), Vol. 11  
 Publisher: ITHEA  
 Year: 2004

41. **Design of Software Applications Using Generic Business Components**  
Authors: Boris Shishkov, Jan L.G. Dietz  
Publ. in: Proceedings of HICSS 2004 – the 37<sup>th</sup> Hawaii International Conference on System Sciences; 5-8 January 2004; Big Island, Hawaii, USA  
Publisher: IEEE  
Year: 2004
42. **Aligning Business Process Modeling and Software Specification in a Component-Based Way, The Advantages of SDBC**  
Authors: Boris Shishkov, Jan L.G. Dietz  
Publ. in: Proceedings of ICEIS 2004 – the 6<sup>th</sup> International Conference on Enterprise Information Systems; 14-17 April 2004; Porto, Portugal  
Publisher: SCITEPRESS  
Year: 2004
43. **Deriving Use Cases from Business Processes, the Advantages of DEMO**  
Authors: Boris Shishkov, Jan L.G. Dietz  
Publ. in: Enterprise Information Systems (EIS) Series – EIS V: Selected Papers from ICEIS 2003 – the 5<sup>th</sup> International Conference on Enterprise Information Systems; 23-26 April 2003; Angers, France  
Publisher: Kluwer Academic Publishers  
Year: 2004
44. **Identifying Business Process Patterns Using Semantic Analysis**  
Authors: Boris Shishkov, Zhiwu Xie, Kecheng Liu, Jan L.G. Dietz  
Publ. in: Virtual, Distributed and Flexible Organisations: Studies in Organizational Semiotics III  
Publisher: Kluwer Academic Publishers  
Year: 2004
45. **Deriving Use Cases from Business Processes, the Advantages of DEMO**  
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Publ. in: Proceedings of ICEIS 2003 – the 5<sup>th</sup> International Conference on Enterprise Information Systems; 23-26 April 2003; Angers, France  
Publisher: SCITEPRESS  
Year: 2003
46. **DEMO-Based Business Engineering Building Blocks – from User Requirements to Use Case Derivation**  
Authors: Boris Shishkov, Jan L.G. Dietz  
Publ. in: Proceedings of SCI 2003 – the 7<sup>th</sup> World Multi-conference on Systemics, Cybernetics and Informatics; 27-30 July 2003; Orlando, Florida, USA  
Publisher: IIS  
Year: 2003
47. **Approach for Component-Based Software Specification – Using DEMO-UML Based Generic Components to Design a Tele-Work Brokerage System**  
Authors: Boris Shishkov, Jan L.G. Dietz  
Publ. in: IADIS *International Journal WWW/Internet: IJWI*, Vol. 1, nr. 1  
Publisher: IADIS  
Year: 2003

48. **Identifying Generic Business Processes Using Semantic Analysis**  
 Authors: Boris Shishkov, Zhiwu Xie, Kecheng Liu, Jan L.G. Dietz  
 Publ. in: Proceedings of OS 2003 – the 6<sup>th</sup> International Workshop on Organizational Semiotics; 11-12 July 2003; Reading, UK  
 Publisher: University of Reading  
 Year: 2003
49. **Simulating the Dynamics of Business Components to be Used in Specifying Software Systems**  
 Authors: Boris Shishkov, Joseph Barjis, Jan L.G. Dietz  
 Publ. in: Proceedings of SCSC 2003 – the 2003 Summer Computer Simulation Conference; 20-24 July 2003; Montreal, Quebec, Canada  
 Publisher: SCS  
 Year: 2003
50. **Deriving Use Cases from Business Process Models Developed Using Norm Analysis**  
 Authors: Boris Shishkov, Zhiwu Xie, Kecheng Liu, Jan L.G. Dietz  
 Publ. in: Dynamics and Change in Organizations: Studies in Organizational Semiotics III  
 Publisher: Kluwer Academic Publishers  
 Year: 2003
51. **Business Engineering Building Blocks**  
 Authors: Boris Shishkov  
 Publ. in: Proceedings of CAiSE DC 2002 – the 9<sup>th</sup> Doctoral Consortium on Advanced Information Systems Engineering; 27-28 May 2002; Toronto, Ontario, Canada  
 Publisher: CAiSE  
 Year: 2002
52. **Modeling of e-Commerce Brokerage Systems Using UML**  
 Authors: Boris Shishkov  
 Publ. in: Proceedings of SAER 2002 – the 16<sup>th</sup> International Conference on Systems for Automation of Engineering and Research; 20-22 September 2002; Varna, Bulgaria  
 Publisher: Publishing House of the Union of Scientists of Bulgaria  
 Year: 2002
53. **Integrated Methodology Allowing Design of ICT Applications Based on Business Process Investigation**  
 Authors: Boris Shishkov, Jan L.G. Dietz  
 Publ. in: Proceedings of the IASTED International Conference on Applied Simulation and Modelling; 25-28 June 2002; Crete, Greece  
 Publisher: IASTED  
 Year: 2002
54. **Design of Tele-Work Brokerage Systems Using DEMO-UML Based Generic Components**  
 Authors: Boris Shishkov, Jan L.G. Dietz  
 Publ. in: Proceedings of the IADIS International Conference on WWW/Internet; 13-15 November 2002; Lisbon, Portugal  
 Publisher: IADIS  
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55. **Modeling of e-Business Brokerage Systems Using UML and Petri Net**  
 Authors: Boris Shishkov, Joseph Barjis  
 Publ. in: Proceedings of the 17<sup>th</sup> edition of the IFIP World Computer Congress; 25-30 August; Montreal, Quebec, Canada  
 Publisher: Kluwer Academic Publisher  
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56. **Using Norm Analysis to Derive Use Cases from Business Processes**  
 Authors: Boris Shishkov, Zhiwu Xie, Kecheng Liu, Jan L.G. Dietz  
 Publ. in: Proceedings of OS 2002 – the 5<sup>th</sup> International Workshop on Organizational Semiotics; 14-15 June 2002; Delft, The Netherlands  
 Publisher: TU Delft  
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57. **Validation of Business Components via Simulation**  
 Authors: Joseph Barjis, Boris Shishkov, Jan L.G. Dietz  
 Publ. in: Proceedings of SCSC 2002 – the 2002 Summer Computer Simulation Conference; 14-18 July 2002; San Diego, California, USA  
 Publisher: SCS  
 Year: 2002
58. **Application Potentials of Use Cases in Modeling of Telework Support Systems**  
 Authors: Boris Shishkov, Joseph Barjis  
 Publ. in: Proceedings of SCI 2001 – the 5<sup>th</sup> World Multi-conference on Systemics, Cybernetics and Informatics; 22-25 July 2001; Orlando, Florida, USA  
 Publisher: IIS  
 Year: 2001
59. **Analysis of Suitability, Appropriateness and Adequacy of Use Cases Combined with Activity Diagram for Business Systems Modeling**  
 Authors: Boris Shishkov, Jan L.G. Dietz  
 Publ. in: Proceedings of ICEIS 2001 – the 3<sup>rd</sup> International Conference on Enterprise Information Systems; 7-10 July 2001; Setubal, Portugal  
 Publisher: SCITEPRESS  
 Year: 2001
60. **UML Based Business Systems Modeling and Simulation**  
 Authors: Joseph Barjis, Boris Shishkov  
 Publ. in: Proceedings of EUROSIM 2001 – the International EUROSIM 2001 Congress; 26-29 June 2001; Delft, The Netherlands  
 Publisher: Rijksuniversiteit Groningen  
 Year: 2001
61. **Telematic Applications for Supporting Telework Related Activities**  
 Authors: Joseph Barjis, Boris Shishkov  
 Publ. in: Proceedings of CSCWD 2001 – the 6<sup>th</sup> International Conference on Computer Supported Cooperative Work in Design; 12-14 July 2001; London, Ontario, Canada  
 Publisher: NRC Research Press  
 Year: 2001
62. **Analysis of a System of Telecenters as a Distributed Network**  
 Authors: Boris Shishkov, Joseph Barjis  
 Publ. in: Proceedings of SAER 2000 – the 14<sup>th</sup> International Conference on Systems for Automation of Engineering and Research; 18-20 September 2000; Varna, Bulgaria  
 Publisher: Publishing House of the Union of Scientists of Bulgaria  
 Year: 2000

## Non-reviewed articles:

1. **DEMO as an Essential Environment in Specifying Software Based on Business Components**  
Authors: Boris Shishkov  
Publ. in: Proceedings of the 1<sup>st</sup> DEMO Workshop; 3 July 2003; Tilburg, The Netherlands  
Publisher: UVT  
Year: 2003
2. **Introduction: Universe of Discourse**  
Authors: Boris Shishkov, Rene van Horik, Nadia Ayad  
Publ. in: In: *Building blocks for Effective Telematic Application Development and Evaluation*  
(Book chapter)  
Publisher: TU Delft  
Year: 2002
3. **Towards Business Engineering Building Blocks**  
Authors: Boris Shishkov, Jan L.G. Dietz  
Publ. in: In: *Building blocks for Effective Telematic Application Development and Evaluation*  
(Book chapter)  
Publisher: TU Delft  
Year: 2002
4. **Modeling of e-Business Brokerage Systems Using DEMO and UML**  
Authors: Boris Shishkov, Jan L.G. Dietz  
Publ. in: In: *Building blocks for Effective Telematic Application Development and Evaluation*  
(Book Chapter)  
Publisher: TU Delft  
Year: 2002
5. **Applying Regression Analysis in Support of Conducted Business Process Modeling in Holding 'Sveta Sofia' PLC**  
Authors: Boris Shishkov  
Publ. in: *Technical Report*  
Publisher: Sofia University Press  
Year: 1999

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## 15. Other

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- Languages
- Bulgarian: Mother Tongue
  - English: Fluent; Russian: Good
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**Computer  
Literacy**

- OS: *Windows 10, DOS, IoS*
  - Programming Languages: *Pascal/Delphi, C, Prolog*
    - DB: *SQL, WEKA*
    - Web: *HTML, PHP, Java Script*
  - Office Applications: *Microsoft Word 2016, Microsoft Excel 2016, Microsoft Power Point 2016, Microsoft Access 2016, Microsoft Outlook 2016*
  - Other Applications
    - Statistics: *Statistica*
    - Simulation: *Arena*
    - Graphics: *Adobe PhotoShop*
    - Audio: *Cubase 9.5*
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**Driving**

- Bulgarian Driving Licence: Since 1992
  - Dutch Driving Licence: Since 2001
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**Hobbies**

- Original Music of Boris Shishkov is available @ iTunes
  - Traveling to different countries
  - Mitsubishi Colt
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