

Curriculum Vitae

Full name: Dmitry I. Ignatov

Date of birth: February 27, 1983

Place of Birth: Kolomna, Moscow Region, Russia.

Official university page <http://www.hse.ru/en/staff/dima>

Place of work

Since 2006 till present I'm working for National Research University Higher School of Economics (HSE) in Moscow, Russia.

My current positions:

Deputy Head, Associate Professor: Department of Data Analysis and Artificial Intelligence at the Faculty of Computer Science

Research Fellow: International Laboratory for Intelligent Systems and Structural Analysis at the Faculty of Computer Science

Past position in details.

In 2001 I worked as an assistant in the Laboratory of Computer Science at The Kolomna Teacher Training University. In 2002-2003 I worked as a programmer in the management department of computer trade company FMC as a developer of databases and system software with MS Visual C ++, Visual Basic and Borland Delphi.

From 2003 till 2005 I worked as a system administrator for the Kolomna department of "International Dialysis Centre".

In 2005 I worked as a system administrator for FMC and database administrator for "Viva Pizza" restaurant.

Since 2006 till 2008 I worked as an engineer for HSE, and since 2007 as a lecturer, and a senior lecturer from 2009 till 2011. Since 2012 I am working as an associate professor of the Department of Data Analysis and Artificial Intelligence at HSE.

Education and Degrees

- Candidate of Sciences*¹ (PhD): State University – Higher School of Economics, 2010, thesis: Models, Algorithms, and Software Tools of Biclustering Based on Closed Sets
- PhD student: All Russian Institute for Scientific and Technical Information (since 2004, year of graduation: 2008, specialization: Theoretical Computer Science (05.13.17))
- Master: State University – Higher School of Economics, 2008, speciality «Applied Mathematics and Information Science»
- Diploma: Kolomna State Teacher Training Institute, 2004, speciality «Physics and Mathematics» (with distinction)

¹ * Candidate of Sciences

According to the International Standard Classification of Education (ISCED) 2011, Candidate of Sciences belongs to ISCED level 8 - "doctoral or equivalent", together with PhD, DPhil, D.Lit, D.Sc, LL.D, Doctorate or similar. Candidate of Sciences allows its holders to reach the level of the Associate Professor.

In details.

I finished school in 1999 with honors (gold medal).

In 1999 I entered the Kolomna Teacher Training Institute (KTTI) specializing in "Physics and mathematics" and graduated in 2004 with honors ("red diploma").

During the study I also obtained the certificate of the Department of Information Technologies on "The Compass – 3D system of solid-state modeling and CAD".

Since November 2004 till 2008 I was the postgraduate student of All-Russian Institute for Scientific and Technical Information of Russian Academy of Sciences (VINITI RAS) of the department "Theoretical and Applied Problems of Computer Science" specializing in "Theoretical Foundation of Computer Science".

I was visiting PhD student of the Postgraduate Programme "Specification of Discrete Processes and Systems of Processes by Operational Models and Logics", Department of Computer Science, Dresden University of Technology (2005) under Prof. Bernhard Ganter supervision supported by DAAD.

In the middle of my PhD study I obtained a master degree in Applied Mathematics and Information Science from HSE (2006-2008).

Finally, I obtained my PhD degree at HSE in 2010 specializing in Mathematical Modeling, Numeric Methods, and Software Systems.

Publications

I'm an author of more than 50 papers written in English and published in peer-reviewed journals, conferences, and workshops in the area of Formal Concept Analysis, Data Mining, Machine Learning and Information Retrieval. I was a co-organizer or a (program) co-chair of several international conferences and workshops: CLA 2018, CLA 2016, ECIR 2013, ICFCA 2012, ICCS 2009 and 2013, RSFDGrC 2011, PReMI 2011, CDUD 2011–2012, CDUD 2016, EEML 2012, 2013 at IEEE ICDM, EEML 2017, SCAKD 2011, SCAKD 2016, AIST 2012–2019, RuSSIR 2014–2016 etc. I was an editor of six LNCS volumes, five CCIS volume and one book on Machine learning. Reviewer for journals: Approximate Reasoning, Applied Soft Computing, Machine Learning, Information Sciences, General Systems, Data&Knowledge Engineering, WIREs Data Mining and Knowledge Discovery, Fundamenta Informatica, Expert Systems with Applications, Behaviour and Information Technology, Computers in Human Behavior, Procedia - Social and Behavioral Sciences, Computational Economics and Econometrics, Machine Learning and Cybernetics etc.

The recent list of publications (upon updates) can be found on my official university page: <http://www.hse.ru/en/staff/dima#sci>

My DBLP page: : http://dblp.uni-trier.de/pers/hd/i/Ignatov:Dmitry_I

Journal papers

[j8] Dmitry I. Ignatov: On closure operators related to maximal tricliques in tripartite hypergraphs. Discrete Applied Mathematics 249: 74-84 (2018)

[j7] Dmitry I. Ignatov, Sergey I. Nikolenko, Taimuraz Abaev, Jonas Poelmans: Online recommender system for radio station hosting based on information fusion and adaptive tag-aware profiling. Expert Syst. Appl. 55: 546-558 (2016)

[j6] Dmitry I. Ignatov, Dmitry V. Gnatyshak, Sergei O. Kuznetsov, Boris G. Mirkin: Triadic Formal Concept Analysis and triclustering: searching for optimal patterns. *Machine Learning* 101(1-3): 271-302 (2015)

[j5] Jonas Poelmans, Dmitry I. Ignatov, Sergei O. Kuznetsov, Guido Dedene: Fuzzy and rough formal concept analysis: a survey. *Int. J. General Systems* 43(2): 105-134 (2014)

[j4] Jonas Poelmans, Dmitry I. Ignatov, Sergei O. Kuznetsov, Guido Dedene: Formal concept analysis in knowledge processing: A survey on applications. *Expert Syst. Appl.* 40(16): 6538-6560 (2013)

[j3] Jonas Poelmans, Sergei O. Kuznetsov, Dmitry I. Ignatov, Guido Dedene: Formal Concept Analysis in knowledge processing: A survey on models and techniques. *Expert Syst. Appl.* 40(16): 6601-6623 (2013)

[j2] Dmitry I. Ignatov, Sergei O. Kuznetsov, Jonas Poelmans, Leonid E. Zhukov: Can triconcepts become triclusters? *Int. J. General Systems* 42(6): 572-593 (2013)

[j1] Jonas Poelmans, Paul Elzinga, Dmitry I. Ignatov, Sergei O. Kuznetsov: Semi-automated knowledge discovery: identifying and profiling human trafficking. *Int. J. General Systems* 41(8): 774-804 (2012)

Journal Reports

Alexander Kotov, Elena Treshcheva, Leonid Bessonov, Dmitry I. Ignatov, Yana Volkovich, Maria Eskevich, Pavel Braslavski: 10th Russian Summer School in Information Retrieval (RuSSIR 2016). *SIGIR Forum* 50(2): 28-35 (2016)

Pavel Braslavski, Ilya Markov, Panos M. Pardalos, Yana Volkovich, Sergei Koltsov, Olessia Koltsova, Dmitry I. Ignatov: 9th Russian Summer School in Information Retrieval (RuSSIR 2015). *SIGIR Forum* 49(2): 72-79 (2015)

Pavel Braslavski, Nikolay Karpov, Marcel Worring, Yana Volkovich, Dmitry I. Ignatov: 8th Russian Summer School in Information Retrieval (RuSSIR 2014). *SIGIR Forum* 48(2): 105-110 (2014)

Research interests

- Machine Learning, Data Mining and Knowledge Discovery in Databases
- Formal Concept Analysis, Frequent (Closed) Sets and Association Rules Mining
- Biclustering, Triclustering and High-dimensional and Multimodal Clustering, Graph Mining
- Recommender Systems
- Information Retrieval
- Social Network Analysis, Recourse Sharing and Crowdsourcing Systems
- Educational Data Mining

Projects & grants

I participated in several research projects and obtained grants on Machine Learning, Data Mining and Information Retrieval supported by DAAD, Russian Foundation for Basic Research (RFBR), Russian Science Foundation (RSF), HSE, and Yandex Company.

- Grant Yandex № 102820 - "Optimization of web page near-duplicate detection: image and similarity" (2004 – 2005)
- PhD student of the Postgraduate Programme "Specification of Discrete Processes and Systems of Processes by Operational Models and Logics", Department of Computer Science, Dresden University of Technology (2005) under Prof. Bernhard Ganter supervision supported by DAAD
- Developing practical course and workbook on "Lattice theory for Data Mining", grant of Innovative Educational Programme, HSE (2006-2007)
- Project of the programme «Teacher-pupils» HSE № 08-04-0022 «Developing methods for building taxonomies of objects based concept lattices and biclustering methods» (2007-2009)
- Grant RFBR № 08-07-92497-NTSNIL_a "Biclustering on relation structures" (2008-2010)
- Grant RFBR 09-07-06030-Г "Organizing 17th International Conference on Conceptual Structures" (2009)
- Developing practical course on "Systems of Machine Learning and Data Mining", Grant of "Foundation for educational innovations " HSE (2010)
- Grant RFBR 11-07-06058-Г "Organizing 4-th International Conference on Pattern Recognition and Machine Intelligence, PReMI-2011 and 13-th International Conference on Rough Sets, Fuzzy Sets, Data Mining and Granular Computing, RSFDGrC-2011)" (2011)
- Project-educational team “Algorithms of intelligence data analysis (Data Mining) for Web-forums for discussion of innovation projects” (joint project of AMI HSE department and Witology Company, chair) (2011-2012)
- Grant RFBR 13-07-00504 "Building taxonomies of different domains and implication dependencies systems for large text collections" (2013-2015)
- Grant RFBR 13-07-06003-Г "Organizing 35-th European Conference on Information Retrieval (ECIR 2013)" (2013)
- Grant RFBR 14-07-06803 МОЛ_Г_1, «Organizing International Conference on Analysis of Images, Social Networks and Texts – AIST 2014»
- Grant RFBR 14-01-93960, «Algorithmic support for knowledge discovery techniques based on formal concept analysis (2014-2015)
- Grant RFBR 16-29-12982, Development of clinical decision support system based on intellectual analysis of heterogeneous semantically rich data (2016-2018)
- Grant RFBR 16-01-00583 Scalable data analysis algorithms for multimodal and relational data (2016–2018)
- RSC Project 17-11-01276, Networking and distributed systems and algorithms and related fundamental problems (2017-2019)
- RSC Project 17-11-01294, Knowledge representation, discovery, and processing: a logic-based approach (2017-2019)
- Russian Federation President grant MD-306.2017.9 Development of computationally efficient methods of pattern recognition based on soft computing technologies for intelligent systems of multimedia information processing (2017-2018)