

1 Full name and date

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| <i>Name</i> | Nikolaj Tatti | <i>Date</i> | 28/09/2016 |
| <i>Gender</i> | Male | | |

2 Date and place of birth, nationality, current residence

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| <i>Date of Birth</i> | 02/05/1982 | <i>Place of Birth</i> | Petrozavodsk, Russia |
| <i>Nationality</i> | Finnish | | |

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3 Education and degrees awarded

03/15 *Adjunct professor (Docent) at Aalto University School of Science*

06/08 *Doctor of Science (Computer Science)*

Defended thesis, titled *Advances in Data Mining: Itemsets as Summaries*, on 6th of June 2008 at Department of Information and Computer Science, Helsinki University of Technology, supervised by Prof. Heikki Mannila.

05/04 – 06/08 *Postgraduate Student*

Postgraduate Student in Laboratory of Computer and Information Science. Major in Computer and Information Science and minor in Mathematics. 45 cr. with 4.8 (of 5) average.

09/99 – 04/04 *Master of Science*

Graduated with extended curriculum in science from Laboratory of Computer and Information Science, Helsinki University of Technology. Major in Computer and Information Science and minor in Mathematics. 185 cr. with 4.3 (of 5) average.

4 Other education and training, qualifications and skills

Programming Experience

C/C++ Over 18 years of programming experience, including software projects and implementations of scientific publications

Java/Perl

Matlab/Python Over 13 years of programming experience, including implementations of scientific publications

5 Linguistic skills

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| <i>Finnish</i> | Native | <i>Russian</i> | Fluent |
| <i>English</i> | Fluent | <i>Swedish</i> | Basics |

6 Current position

Helsinki Institute of Information Technology (HIIT) Research Fellow from 01/15. Affiliated with Data Mining Group, Department of Information and Computer Science, Aalto University.

7 Previous work experience

Past Work Experience

- 02/13 – 12/14 *Data Mining Group, Aalto University*
Postdoctoral researcher.
- 10/12 – 01/13 *DTAI group, KU Leuven*
Postdoctoral researcher, Pattern Set Mining project.
- 10/09 – 09/12 *ADReM group, University of Antwerp*
FWO postdoctoral researcher (Postdoctorale mandaten).
- 04/09 – 09/09 *ADReM group, University of Antwerp*
FWO Project: Pattern Set Mining.
- 01/03 – 03/09 *Laboratory of Computer and Information Science*
Part-time researcher until May, 03. Full-time researcher since May, 03. Research and analysis of binary data.
- 10/01 – 11/02 *Init laboratory, HUT*
Civil service. Programming on mobile platforms (C/C++/Java).
- 06/99 – 12/02 *Nokia Research Center/Ruoholahti*
Part-time trainee during falls and full-time trainee during summers. Programming and system design.
- 09/97 – 05/99 *Nokia Research Center/Toijala office*
Part-time trainee during falls and full-time trainee during summers. Various tasks involving programming.

Research Visits

- Yahoo Labs* Yahoo Research Labs, Spain, 2 weeks, Sept. 2011, Dr. Aris Gionis
Monash U. Monash University, Australia, 2 months, Jan.–Feb. 2011, Prof. Geoff Webb
U. Antwerp University of Antwerp, Belgium, 1 week, Nov. 2008, Prof. Bart Goethals
U. Utrecht University of Utrecht, NL, 1 week, Sept. 2008, Prof. Arno Siebes

8 Research funding

- (i) FWO Postdoctoral mandate: personal research grant for 3 years, given by Flemish science foundation, 09–12
- (ii) Co-promoter of a project between University of Antwerp and K.U. Leuven, 4 years, 536 000 Euros, in total, given by Flemish science foundation, 11–15.
- (iii) Funding of a small project for one year. 7 000 Euros, primarily for travelling, given by University of Antwerp, 10.
- (iv) Travel grant for visiting Monash University, Australia, given by Flemish science foundation, 10–11.

9 Merits in teaching and pedagogical competence

Teaching Experience

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| <i>Spring 16</i> | Organizer/Lecturer of the course (Aalto): <i>Information Visualization</i> . |
| <i>Spring 14</i> | Organizer/Lecturer of the course (Aalto): <i>Matrix Approximations</i> . |
| <i>Spring 10–12</i> | Organizer/Lecturer of the course (UA): <i>Advanced AI</i> . |
| <i>Spring 2009</i> | Assistant for the course (UA): <i>Advanced AI</i> . |
| <i>Spring 2008</i> | Organizer of the post-graduate course (HUT): <i>Popular Algorithms in Data Mining and Machine Learning</i> . |
| | Organizer of the undergraduate course (HUT): <i>Seminar on Information Tech.: Combinatorial Optimization</i> . |
| <i>Fall 2007</i> | Assistant of the post-graduate course (HUT): <i>Information Networks</i> . |

Postgraduate supervision

During my stay at University of Antwerp I participated in daily supervision of two PhD students Dr. Michael Mampaey and Dr. Boris Cule. This resulted in joint publications, 3 with Dr. Mampaey and 4 with Dr. Cule. These publications greatly advanced their PhD studies. Dr. Mampaey received his PhD in 2011 and Dr. Cule received his PhD in 2012. I am also currently an advisor for Polina Rozenshtein, supervised by Prof. Aristides Gionis.

10 Awards, prizes and honours

Best student paper in data mining at ECMLPKDD14

Polina Rosenshtein, Aristides Gionis, and Nikolaj Tatti Discovering dynamic communities in interaction networks. In: *Proceedings of European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECMLPKDD 2014)*. 2014

Best student research track paper at KDD11

Michael Mampaey, Nikolaj Tatti, and Jilles Vreeken. Tell me what I need to know: succinctly summarizing data with itemsets. In: *Proceedings of the 17th ACM SIGKDD international conference on Knowledge discovery and data mining (KDD 2011)*. 2011

11 Other academic merits

Organizing Experience

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| <i>Workshops</i> | Co-organizer of workshop <i>Instant Interactive Data Mining (IID)</i> at ECMLPKDD12 Co-organizer of workshop <i>Useful Patterns (UP)</i> at KDD10 |
| <i>Tutorials</i> | Organizer of tutorial <i>Data scientist's guide for writing papers</i> at ECMLPKDD16 Organizer of tutorial <i>Lunch is never free: how Statistics, Information Theory, and MDL are connected</i> at ECMLPKDD14 Co-organizer of tutorial <i>Pattern Set Mining</i> at ICDM11 and ECMLPKDD10 |
| <i>Chairs</i> | Demo track co-chair of ECMLPKDD16 Tutorial co-chair of ECMLPKDD15 and ICDM12 |

Review Experience

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| <i>PC member</i> | ECMLPKDD09–16, SDM10–11,15, KDD10,14–16, ICDM12–14, WWW14–16, Discovery Science 11–12, CIKM15 |
| <i>Area chair</i> | ICDM16 |
| <i>Reviewer</i> | NIPS10,12,13–14 (equivalent role to PC member in the above conferences) |
| <i>Reviewer for journals</i> | DMKD, KAIS, TKDE, TKDD, Artificial Intelligence, SIGKDD Explorations, DKE, AMAI, JMLR |
| <i>Editorial board</i> | ECML PKDD 13–16 journal track DMKD |
| <i>External reviewer</i> | PKDD08, PODS09, ICDM09, CIKM10, PAKDD10 |

Experience as a dissertation pre-examiner and opponent

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| <i>Pre-examiner</i> | Boris Cule, University of Antwerp, 2012 Ibrahim A., Indian Institute of Science, Bangalore, 2016 |
| <i>Opponent</i> | Boris Cule, University of Antwerp, 2016, (member of Jury committee) |

12 Scientific impact of research

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| <i>Papers</i> | 46 scientific papers in top international peer-reviewed forums, 14 papers are published in venues ranked as Jufo 3 (highest rank) and 19 papers in venues ranked as Jufo 2. The ranking of venues is available at http://www.julkaisuforum.fi/ |
| <i>Citations</i> | 695 (Google Scholar) |
| <i>H-index</i> | 16 (Google Scholar) |
| <i>i10-index</i> | 20 (Google Scholar) |