

# Curriculum Vitae

Magdalena Topczewska, PhD

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## Education

- 2013-2014 Postgraduate studies - *Biostatistics – applications of statistics in clinical medicine, biology, and public health* (studies in English), Medical University in Białystok (lecturers from Hasselt University, Belgium)
- 2009 Białystok University of Technology, Faculty of Computer Science  
Title: PhD  
Domain: technical sciences – computer science  
Thesis entitled: *Efficient classification and visualization methods for multidimensional data* (supervisor: L. Bobrowski)
- 1992-1997 Master degree – Computer science (with honours)  
Białystok University of Technology, Institute of Computer Science  
Thesis entitled: *The Clinical Database - project and implementation in the SAS® System* (supervisor: L. Bobrowski) (1997)

## Additional Education

- 2015 TOP 500 Innovators: Internship Training in Managing and Commercialising Research (9-weeks program), Cambridge, Oxford
- 2014 Course: *Writing in the Sciences*, Stanford University (online)
- 2014 Workshop: *Statistics and data analysis*, Gdańsk University of Technology
- 2012 Course: *Survey data analysis – advanced course*, Statsoft, Cracow
- 2009 Course: *Generalized Linear (Mixed-effects) Models*, Collegium Medicum UJ, Cracow
- 2003 IASC-IFCS Joint International Summer School: *Classification and Data Mining in Business, Industry and Applied Research - Methodological and Computational Issues*, July 23th-30th, 2003, University of Lisbon, Lisbon, Portugal
- 1995-1997 Pedagogical course, Białystok University of Technology

## Professional experience

- 1997 – still Białystok University of Technology, Faculty of Computer Science
- 2009 – still: Assistant Professor
  - 2007 – 2009: Lecturer
  - 1997 – 2000: Teaching and Research Assistant
  - 1996 – 1997: Candidate Teaching Assistant (Assisted in teaching course: Statistics)
- Teaching activities (lectures, classes) including mathematical and economical subjects in the fields of studies: Mathematics, Computer Science
- Programming fundamentals, Probabilistic methods, Probabilistic methods and Statistics, Statistics and data analysis, Data

exploration, Decision support systems, Optimization methods and linear programming, Methods of multidimensional data analysis, Tools of computer science, Application building in the technology of .NET, Statistical models, Self-learning systems, Information technology, Knowledge discovery from databases, Seminar, Proseminar

- Master theses and engineering works supervising in the field of computer science

1997 – still	Statistical analyses – cooperation with medical community – cooperation with Medical University of Białystok (since 1997), Statmed Sp. z o.o. (since 2014)
2013	Classes during Interdisciplinary PHD Studies PAN (IPI PAN) „ <i>Information technologies: research and their interdisciplinary application</i> ”, subject: <i>Models and computational techniques for exploration of multidimensional biomedical data</i>
2009	Lecturer of courses „ <i>The use of the office suite</i> ” in project: „ <i>Professional companies staff of the Podlasie region</i> ” organized by Centre for Innovation and Technology Transfer of Białystok University of Technology
1995 – 1997	Lecturer of courses for businessmen – T-matic Grupa Computer Plus, Sp. z o.o

## Additional activity

### Organizational activity

2013 – still	Member of the Panel on Study Program in the field of Computer Science
2012 – still	Member of the Faculty Committee on Quality of Education
2012 – still	Member of the Commission for the Faculty of Computer Science Promotion
2012 – still	Member of the Faculty Recruitment Commission
2011 – still	Member of the University Electoral Commission (since 2014 vice chairman)
2011 – still	Scientific Editor of the journal: <i>Advances in Computer Science Research</i>
2009 – 2011	Tutor of the Scientific Student Society of the Faculty of Computer Science PB

### Membership in scientific societies

2015 – still	Association of TOP 500 Innovators
2012 – still	Polish Statistical Association
1997 – still	Polish Society for Computer Simulation
1997 – still	International Society of Clinical Statistics (Polish National Group)

### Reviews of articles for journals

- Information Sciences (JCR)
- Tourism Management (JCR)

### Membership in the organizing committee of the conferences

- Scientific Workshops of Polish Society for Computer Simulation: 1999, 2004, 2009 (secretary), 2014 (secretary)

- 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 139<sup>th</sup> International Seminars on Statistics and Clinical Practice, 2000, 2002, 2008, 2014
- International Conference on „Building Information Society in Healthcare in the Euroregion Niemen”, 2005
- European Simulation Multiconference, 1999

#### Participation in research projects

- **PhD grant:** „Efficient classification and visualization methods for multidimensional data”, N N518 3433 33, 2007-2008 – contractor
- **European Cooperation in Science and Technology, Action COST-282:** „Knowledge Exploration in Science and Technology”, 2001-2006 – contractor
- **Execute Programme of Scientific and Technological Co-Operation Between the Italian Republic and the Republic of Poland** 2004-2006, project 5: „Feature selection methods and data visualization on medical diagnosis applications” – contractor
- **KBN Grant:** „Temporal knowledge representation and its implementation in information systems supporting medical procedures”, Nr 3 T11F 011 30 – contractor
- **University grant W/WI/1/2009:** „Methods and algorithms for large datasets exploration and their applications in decision support systems”, Białystok University of Technology, Faculty of Computer Science – contractor
- **University grant W/WI/7/2006:** „Knowledge exploration technologies referring to the bionic concepts”, Białystok University of Technology, Faculty of Computer Science – contractor
- **University grant W/WI/1/2005:** „Databases exploration and extraction of pattern as information society technology”, Białystok University of Technology, Faculty of Computer Science – contractor
- **University grant S/WI/2/2013:** „Methods of multidimensional data sets exploration and modeling”, Białystok University of Technology, Faculty of Computer Science, 2013-2015 – contractor
- **University grant S/WI/2/2008:** „Methods and algorithms for data exploration”, Białystok University of Technology, Faculty of Computer Science, 2008-2012 – contractor
- **University grant S/WI/2/2003:** „Methods of knowledge acquisition from databases”, Białystok University of Technology, Faculty of Computer Science, 2003-2007 – contractor

#### Additional information

Foreign languages	English – B2 (FCE, Cambridge University) Russian – basic level
Software	MS Office, Latex, Matlab, Lightroom, Gimp, Adobe Photoshop, Corel Draw, Weka, SAS, Statistica, Stata, Statgraphics, R
Driving licence	B
Hobby	Photography (completed courses of children and wedding photography), literature

### **Awards, honors and distinctions**

- Bronze medal for long service (2014)
- The awards of the President of Białystok University of Technology – 5 (1999, 2004, 2006, 2009, 2015)
- The Distinctions for the paper presented at the 5th International Conference on Computer Recognition Systems CORES 2007, Wrocław, 22-25.10.2007, funded by the Association for Image Processing
- The first award for the best article (Magdalena Topczewska, Leon Bobrowski: "Data collection and acquisition of knowledge (data mining) on the example of the clinical database" IVth Conference of the SAS System Users in Poland, SASForum '97, 20-21.10.1997, Warsaw) (1997)
- Honourable mention for the best presentation of the article (Magdalena Topczewska, Jan Andrzej Domitrz: "Observation of the beginning of life on the basis of a sequence of images ", I National Scientific Conference KOSYR – Computer Recognition Systems, 24-27.05.1999, Trzebieszowice)