## PERSONAL DETAILS

Date of birth: 29 June 1980

Marital status: Married

### Address

Dabrowa

Rzeszów, Poland

### CONTACT DETAILS

Mobile:

E-mail:

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### Professional Statement

Highly motivated, strategic-thinking professional with more than ten years hands-on experience in programming, software design and data mining. Experienced in all the design, implementation and testing stages of building a software product as well as in several research projects. Recently interested in interactive database visualization, knowledge-based data clustering and revenue management techniques. A big fan of LATEX, Vim and data analytics enthusiast.

## EDUCATION

2005-2012 Ph.D.: Warsaw University of Technology, Faculty of Electronics and Information Technology, Institute of Computer Science

1999-2004 M.Sc. Eng.: Warsaw University of Technology, Faculty of Electronics and Information Technology

# Ph.D. Thesis

Piotr Lasek: Efficient Density-Based Clustering. Oficyna Wydawnicza Politechniki Warszawskiej. Warszawa 2012.

# Publications

- 1. Lasek P. C-NBC: Neighborhood-Based Clustering with Constraints (in review)
- 2. Godfrey P., Gryz J., Lasek P., Razavi N. Skydive: An Interactive Data Visualization Engine (in review)
- Suraj Z., Lasek A., Lasek P. Inverted fuzzy implications in approximate reasoning, Fundamenta Informaticae 2015
- 4. Lasek, P., Lasek, K.: Relative Constraints as Features, In Proceedings of the Workshop on Concurrency, Specification and Programming (CS&P 2014), Chemnitz, Germany, 2014, September 29-October 1, volume 245 of Informatik-Bericht, Humboldt University
- Lasek, P.: C-NBC: Neighborhood-Based Clustering with Constraints, In Proceedings of the Workshop on Concurrency, Specification and Programming (CS&P 2014), Chemnitz, Germany, 2014, September 29- October 1, volume 245 of Informatik-Bericht, Humboldt

- University
- 6. Lasek, P. CDM: A Prototype Implementation of the Data Mining JDM Standard. Proceedings of the Ninth International Conference on Dependability and Complex Systems DepCoS-RELCOMEX. June 30–July 4, 2014, Brunów, Poland. Springer International Publishing
- 7. Maciura Ł., Lasek P., Iwanicka-Maciura A. Koncepcja systemu telemedycznego z komunikacją głosową służącego do przypominania i zdalnej kontroli zażywania leków przez pacjentów geriatrycznych i psychiatrycznych. Przegląd Elektrotechniczny 2014
- Lasek, P.: An Extended Version of the LVA-Index, Intelligent Data Engineering and Automated Learning – IDEAL 2013 / H. Yin et al. (Eds.), Lecture Notes in Computer Science vol. 8206, 2013, Springer, pp. 127–134.
- Lasek, P.: The LVA-Index in Clustering, New Results in Dependability and Computer Systems, Advances in Intelligent Systems and Computing Volume vol 224, 2013, Springer, pp. 275-283.
- Kryszkiewicz, M., & Lasek, P. 2010. A Neighborhood-Based Clustering by Means of the Triangle Inequality. IDEAL 2010, pp. 284-291.
- 11. Marzena Kryszkiewicz and Piotr Lasek. 2010. TI-DBSCAN: clustering with DBSCAN by means of the triangle inequality. In Proceedings of the 7th international conference on Rough sets and current trends in computing (RSCTC'10), Springer-Verlag, Berlin, Heidelberg, 60-69
- Marzena Kryszkiewicz and Piotr Lasek. 2008. FUN: Fast Discovery of Minimal Sets of Attributes Functionally Determining a Decision Attribute. In Transactions on Rough Sets IX, Lecture Notes In Computer Science, Vol. 5390. Springer-Verlag, Berlin, Heidelberg 76-95
- 13. Piotr Lasek: A faster method of building the LVA-Index, Information Systems Architecture and Technology, System Analysis in Decision Aided Problems, 2009. ss. 165-174.
- Piotr Lasek: LVA-Index. An efficient way to determine nearest neighbors, Advances in Data Management, 2009. ss. 623-633.
- Marzena Kryszkiewicz, Piotr Lasek: Fast Discovery of Minimal Sets of Attributes Functionally Determining a Decision Attribute, RSEISP'07, Warszawa, LNAI 4585, Springer (2007), s. 320-331
- Piotr Lasek, Henryk A. Kowalski: Visualization of Three Dimensional Vectocardiological Loops Using Elliptical Fourier Descriptors, XIV KBIB'05, Częstochowa (2005)

## RESEARCH REPORTS

- Godfrey P., Gryz J., Lasek P. Interactive visualization of large data sets. Technical Report EECS-2015-03, York University
- Lasek P., Bazan J. G. Examining JDM as a Tool for Implementing Data Mining Algorithms. ICS Research Report 4/2014, Warsaw, June 2014
- 3. Kryszkiewicz, M., & Lasek, P. (2011). A Neighborhood-Based Clustering by Means of

- the Triangle Inequality and Reference Points. Warsaw: ICS Research Report 3/2011.
- 4. Kryszkiewicz, M., & Lasek, P. (2010b). TI-DBSCAN: Clustering with DBSCAN by means of the triangle inequality. Warsaw: ICS Research Report 3/2010.
- Piotr Lasek: LVA-Index: an Efficient Way to Determine Nearest Neighbors, Research Report, Politechnika Warszawska, Instytut Informatyki, 2008
- Henryk A. Kowalski, Piotr Lasek: Normalizacja eliptycznych deskryptorów Fouriera, ICS Research Report 15/2004, Warsaw, October 2004

### RESEARCH PROJECTS AND GRANTS

- 2014-2016 Big data in the small York University / Empress Software Inc., Toronto, Canada.
- 2015-2016 Nonstandard methods of data clustering Chair of Computer Science, University of Rzeszów, Poland.
- 2013-2014 Efficient clustering with constraints Chair of Computer Science, University of Rzeszów, Poland.
- 2012-2013 Density based clustering using the LVA-Index Chair of Computer Science, University of Rzeszów, Poland.
- 2005-2008 Mining data in large data resources Institute of Computer Science, Warsaw University of Technology, Poland
- 2005-2007 Analysis of marketing information for small and medium sized enterprises AMI-SME was a EU-funded project that aimed to structure and automate the identification, gathering and analysis of market information. It was designed to support the internationalization process of small and medium-sized enterprises. AMI-SME designed and implemented a software prototype for a domain model assisted Internet search with integrated document storage and knowledge organization. AMI-SME software supports systematic search activities that go beyond single-step retrieval.
- 2005-2007 Semi automated ontology building Institute of Computer Science, Warsaw University of Technology. The Text-Onto-Miner project was undertaken by the Warsaw University of Technology Institute of Computer Science as a part of research agreement with France Telecom. The project goal was to create a set of tools both software and methods, that could be used to speed up and improve a process of creating ontologies.

### Conferences and visits

- 2015 IBM Centers for Advanced Studies Research University Days, Markham, Ontario, Canada
- 2014 24th Annual International Conference on Computer Science and Software Engineering (CASCON 2014), Markham, Ontario, Canada
- 2014 23th international Workshop on Concurrency, Specification and Programming (CS&P 2014), Chemnitz, Germany
- 2014 The Ninth International Conference on Dependability and Complex Systems DepCoS-RELCOMEX 2015, Brunów, Poland
- 2013 The 14th International Conference on Intelligent Data Engineering and Automated Learning (IDEAL'2013), Hefei, China

- 2013 European University of Cyprus, ERASMUS Lifelong Learning Programme
- 2013 The Ninth International Conference on Dependability and Complex Systems DepCoS-RELCOMEX 2014, Brunów, Poland
- 2009 The 30th International Conference Information Systems Architecture and Technology, Szklarska Poreba, Poland
- 2009 The International Conference on Man-Machine Interactions, The Beskids, Poland
- 2005 The 14th National Conference on Biocybernetics and Biomedical Engineering, Częstochowa, Poland

## EMPLOYMENT

- 2014-present York University, Postdoctoral Fellow at Dep. of Computer Science and Engineering
  - 2014 Warsaw University of Technology, Institute of Computer Science, Intern
  - 2012-2014 University of Rzeszów, Chair of Computer Science, Assistant Professor

Research interests: Data Mining, density-based clustering, clustering with constraints and knowledge-based clustering.

Courses taught: Introduction to Data Mining, Parallel and Distributed Programming, Software Engineering, Mobile Databases.

Other responsibilities: secretary of the local Rough Set and Petri Net research group, departmental coordination of the ERASMUS program.

- $2010\mbox{-}2012$  EccSoft / Aditeo (Rzeszów), Design Engineer
  - Designed and was responsible for tests of financial, accounting and registration software applications. Led and coordinated work of a group of several developers.
- 2009-2010 Nokia (Tampere, Finland), Design Engineer (C++, Symbian, Qt, SQLite)

  Analyzed source code of mobile applications, broke down problems related to software design of currently developed projects, designed components to be implemented, worked with other peers and programmers in a collaborative environment.
- 2007-2009 Comarch (Kraków), Senior Software Developer (C++, Symbian, Qt, SQLite)

  As a member of a group of developers implemented crucial modules of mobile software for one of the world leading suppliers of smartphones. Participated in all life cycle stages (designing, coding, defect-fixing) of the development.
- 2006-2007 Motorola (Kraków), Software Developer (C++)
  - Worked as a team member in a department responsible for developing and maintenance of mobile radio software. Took part in a numerous trainings such as: Quality Management, Software Development Processes, Security Programming, etc.
- 2004-2006 m-Core (Warszawa), Software Developer (C#, SQL Server, SQLite)

  Designed and developed of sales software applications designed for mobile platforms such as Palm OS and Windows Mobile.
- 2003-2004 esentia.pl (Warszawa), Software Developer (Java, Swing, MySQL) Worked as a Java Swing and Web Developer.