

## PERSONAL &amp; CONTACT DETAILS

Date of birth: June 29, 1980

Marital status: Married

Address

[REDACTED]  
[REDACTED]

Contact Mobile:

[REDACTED]

E-mail:

[REDACTED]

Website: <http://piotrlasek.com>

Twitter: [http://twitter.com/pp\\_lasek](http://twitter.com/pp_lasek)



## 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.

## 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. Godfrey P., Gryz J. Lasek P., Razavi N.: Interactive Visualization of Big Data, in review
2. Godfrey P., Gryz J. Lasek P., Razavi N.: Visualization through Inductive Aggregation, in review
3. Godfrey P., Gryz J. Lasek P.: Interactive Visualization of Large Data Sets, in review
4. Godfrey P., Gryz J., Lasek P., Razavi N.: Skydive: An Interactive Data Visualization Engine. In IEEE Symposium on Large Data Analytics and Visualization, Chicago, USA, October 25-26., 2015
5. Lasek P.: Instance-Level Constraints in Density-Based Clustering, In Proceedings of the Workshop on Concurrency, Specification and Programming (CS&P 2015), Rzeszów, Poland, 2015
6. Suraj Z., Lasek A., Lasek P. Inverted fuzzy implications in approximate reasoning, Fundamenta Informaticae 2015

7. Lasek, P., Lasek, K.: Relative Constraints as Features Extended Abstract, 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
8. 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
9. 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
10. 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
11. 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.
12. 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.
13. Kryszkiewicz, M., & Lasek, P. 2010. A Neighborhood-Based Clustering by Means of the Triangle Inequality. IDEAL 2010, pp. 284-291.
14. 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
15. 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
16. 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.
17. Piotr Lasek: LVA-Index. An efficient way to determine nearest neighbors, Advances in Data Management, 2009. ss. 623-633.
18. 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

19. Piotr Lasek, Henryk A. Kowalski: Visualization of Three Dimensional Vectocardiological Loops Using Elliptical Fourier Descriptors, XIV KBIB'05, Częstochowa (2005)

#### RESEARCH REPORTS

1. Godfrey P., Gryz J., Lasek P. Interactive visualization of large data sets. Technical Report EECS-2015-03, York University
2. 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.
5. Piotr Lasek: LVA-Index: an Efficient Way to Determine Nearest Neighbors, Research Report, Politechnika Warszawska, Instytut Informatyki, 2008
6. 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*, Institute of Computer Science, Warsaw University of Technology, Poland
- 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 The 5th IEEE Symposium on Large Data Analysis and Visualization, Chicago Illinois, October 25-26, 2015
- 2015 Sixth Workshop on Big Data Benchmarking (WBDB 2015), June 16-17, 2015, Toronto, Canada
- 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 Poręba, Poland
- 2009 The International Conference on Man-Machine Interactions, September 25-27, The Beskids - Kocierz Pass, Poland
- 2005 The 14th National Conference on Biocybernetics and Biomedical Engineering, Częstochowa, Poland

#### EMPLOYMENT

- 2014-present *York University*, Faculty of Electrical Engineering and Computer Science (Toronto, Canada), *Postdoctoral Fellow*  
Working on interactive database visualization methods as well as on clustering and visualization of high dimensional data sets.
- 2014-2014 *Warsaw University of Technology*, Institute of Computer Science (Warsaw, Poland), *Research & Teaching Intern*  
Supervised and supported a group of students working on data mining assignments. Worked on developing constraint-based clustering algorithms.
- 2012-2014 *University of Rzeszów*, Chair of Computer Science, Department of Mathematics and Natural Sciences (Rzeszów, Poland), *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.

2010-2012 *EccSoft / Aditeo* (Rzeszów, Poland), *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, Poland), *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, Poland), *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, Poland), *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, Poland), *Software Developer* (Java, Swing, MySQL)

Worked as a Java and web developer.