Personal & contact details

Date of birth: June 29, 1980

Marital status: Married

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Twitter: `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 Techonology

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 & Teacing 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.