

CURRICULUM VITAE

PIOTR BRÓDKA



PERSONAL DATA

Date of birth: 11.08.1984
 Nationality: Polish
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EDUCATION

21.10.2013 **Stanford University**, Top500 Innovators
 20.12.2013
 01.10.2008 **Wroclaw University of Technology**, Wroclaw, Poland, Computer Science, Ph.D. in Computer
 30.10.2012 Science, dissertation: *A Method for Group Extraction and Analysis in Multi-layered Social Networks*
 01.02.2012 **Wroclaw University of Technology**, Wroclaw, Poland, Postgraduate studies in Research Project
 01.12.2012 Management and Commercialization of research results, <http://zpb.edp.org.pl/>
 01.09.2007 **Blekinge Institute of Technology, Sweden**, degree of Master of Science, main field of study
 27.06.2012 Computer Science
 01.10.2003 **Wroclaw University of Technology**, Wroclaw, Poland, degree of Master of Science, main field
 07.07.2008 of study Computer Science, thesis: *Key User Extraction Based on Telecommunication*

PROFESSIONAL EXPERIENCE

15.11.2012 **Wroclaw University of Technology**, Wroclaw, Poland, Assistant Professor
 curent

- Main Projects:
 - Spread of influence in multilayer networks
 - Business Intelligence tools for virtual network of POS
 - ENGINE - European research centre of Network intelligence for INnovation Enhancement
 - Data mining in complex social network systems
 - TRANSFoRm – Translational Research and Patient Safety in Europe
 - Machine Learning Algorithms for DSL service recommendation
 - Assessment of different financial behaviour models

01.12.2010 **Wroclaw University of Technology**, Wroclaw, Poland, Research Assistant
 15.11.2012

- Main Projects:
 - GRASP# - Groups Roles Associations of Suspected Persons Data mining in complex social network systems
 - TRANSFoRm – Translational Research and Patient Safety in Europe
 - Data mining in complex social network systems

04.01.2010 **Research & Engineering Center Sp z o.o.** – Software developer
 31.12.2010

- Research and development activities within the project GRASP - Groups Roles Associations of Suspected Persons

01.08.2008 **Value Based Advisors Sp. z.o.o.** -.NET Software developer
 30.11.2009

- Development of Business Intelligence solutions using Microsoft technologies

RESEARCH PROJECTS

01.01.2017 Principal researcher and Project manager in Spread of influence in multilayer networks, National
 31.12.2020 Science Centre, 291 400 PLN
 01.03.2015 Researcher in Business Intelligence tools for virtual network of POS, National Centre for Research
 28.02.2017 and Development, INNOTECH-K3/IN3/56/225874/NCBR/15 2 996 865 PLN

- 01.06.2013 Project manager **ENGINE - European research centre of Network intelligence for INnovation**
 30.11.2016 **Enhancement**, 7FP, REGPOT 4 731 165€
- 01.06.2012 Principal researcher in **Assessment of different financial behaviour models**, ALIOR BANK
- 01.10.2012 Principal researcher in **Machine Learning Algorithms for DSL service recommendation**,
 TPSA/Orange
- 01.03.2010 Principal researcher in **TRANSFoRm – Translational Research and Patient Safety in Europe**
 31.05.2015 ICT, 7FP, 9 726 688 €
- 20.09.2011 Principal researcher in **Data mining in complex social network systems**, National Science
 20.09.2013 Centre 375 100 PLN
- 23.09.2009 Principal researcher in **GRASP# - Groups Roles Associations of Suspected Persons Data**
 23.09.2011 **mining in complex social network systems**, National Centre for Research and Development
 1 3380 000 PLN

COURSES, SCHOOLS AND INTERNSHIPS

- 2016 The International School and Conference on Network Science, Soul, South Korea
- 2015 Blekinge Institute of Technology, Sweden
- 2015 The International School and Conference on Network Science, Zaragoza, Spain
- 2014 Uppsala University, Department of Information Technology, Division of Computing Science, Sweden
- 2014 The International School and Conference on Network Science, UC Berkeley, USA
- 2013 Top500 Innovators, Stanford University
- 2013 The International School and Conference on Network Science, Copenhagen
- 2013 Social Network Analysis by Lada Adamic, University of Michigan
- 2013 Java SE 7 Programming Ed 2 PRV an Oracle University training class
- 2012 The International Project Management Association (IPMA) Level D, Certified Project Management Associate Certificate no. 635/2012
- 2012 The International School and Conference on Network Science, Evanston
- 2011 The International School and Conference on Network Science, Budapest
- 2011 Six months training in C#

CITATION

- **Web of Science 140 h-index 6** (without self-citation)
- **Scopus 206 h-index 6** (without self-citation)
- **Google Scholar 590 h-index 14**

AWARDS AND HONORS

- 1) Rector Award for outstanding contribution to the Wrocław University of Science and Technology
- 2) *Fellowship for the best young scientists* awarded by Polish Ministry of Science and Higher Education 2015-2018
- 3) *Young Staff 2015+*, a scholarship from Wrocław University of Technology within Human Capital Program 2013/2014 and in 2014/2015
- 4) Rector Award for scientific achievements 2011/2012
- 5) Rector Award for scientific achievements 2010/2011
- 6) Scholarship under the *Enterprising Ph.D. student* programme, funded by the Lower Silesian Marshal's Office and the European Union under the European Social Fund 2010-2012.
- 7) Wrocław City Council Scholarship 2011/2012
- 8) *Young Staff*, a scholarship from Wrocław University of Technology within Human Capital Program 2013
- 9) *Young Staff*, a scholarship from Wrocław University of Technology within Human Capital Program 2012
- 10) The winner of the competition for Young Scientists to fund research aimed at developing young scientists and PhD students, organized by the Institute of Informatics, Wrocław University of Technology 2012/2013
- 11) The winner of the competition for Young Scientists to fund research aimed at developing young scientists and PhD students, organized by the Institute of Informatics, Wrocław University of Technology 2011/2012
- 12) Scholarship from the Wrocław University of Technology 2011/2012
- 13) Scholarship from the Wrocław University of Technology 2010/2011
- 14) Best Poster/Demo/Paper Award at the conference SocInfo 2011 for the article "Tracking Group Evolution in Social Networks"

- 15) The winner of "Student Travel Support" at the conference SocInfo 2012
- 16) The winner of "Student Travel Support" at the conference SocInfo 2011
- 17) PhD scholarship in 2008/2009, 2009/2010, 2010/2011 and 2011/2012
- 18) Scholarship for outstanding achievement in science in 2004/2005, 2005/2006, 2006/2007, 2007/2008, 2008/2009, 2010/2011 and 2011/2012

LANGUAGES

Polish	Native
English	Very Good
Russian	Beginner

HOBBY

American and Canadian Cinematography, Motorsports, Travels

REFERENCES

- Prof. Przemyslaw Kazienko (PhD advisor), Wroclaw University of Technology, Poland,
kazienko@pwr.wroc.pl, +48713203609
- Prof. Krzysztof Cetnarowicz (PhD reviewer), AGH - University of Science and Technology, Poland,
cetnar@agh.edu.pl, +48126339406
- Prof. Adam Wierzbicki (PhD reviewer), Polish-Japanese Institute of Information Technology, Poland,
adamw@pjwstk.edu.pl, +48322371339
- Prof. Bogdan Gabrys Bournemouth University, Poole House, Great Britain,
bgabrys@bournemouth.ac.uk, +441202965298

LIST OF PUBLICATIONS

Most up to date list can be found at <http://www.ii.pwr.wroc.pl/~brodka> or
<http://piotrbrodka.pl/>

PUBLICATIONS

BOOKS AND BOOK CHAPTERS

1. Bródka P., Kazienko P.: **Multi-layered social networks**, Encyclopedia of Social Network Analysis and Mining. Springer, 2014,
2. Bródka P., Saganowski S., Kazienko P.: **Community Evolution**, Encyclopedia of Social Network Analysis and Mining. Springer, 2014,
3. Bródka P. **Key Users in Social Network. How to find them?** LAP Lambert Academic Publishing, ISBN-13: 978-3-659-19597-6, ISBN-10: 3659195979
4. Filipowski T., Bródka P., Kazienko P.: **EcoRide - the social-based system for car traffic optimization**. Chapter in Green Technologies and Business Practices: An IT Approach. IGI-Global, August 2013, DOI: 10.4018/978-1-4666-1972-2
5. Kazienko P., Bródka P.: **Data Warehouses**, Published by PRINTPAP Łódź, Wrocław 2011, ISBN 978-83-62098-97-2

ARTICLES IN INTERNATIONAL JOURNALS

6. Saganowski S., Gliwa B., Bródka P., Zygmunt A., Kazienko P., Koźlak J.: Predicting Community Evolution in Social Networks. in reviews, 2015.
7. Różewski P., Jankowski J., Bródka P., Michalski R.: Knowledge workers' collaborative learning behavior modeling in an organizational social network. Computers in Human Behavior, 2015. doi:10.1016/j.chb.2014.12.014
8. Jankowski J., Michalski R., Bródka P., Kazienko P., Utz S.: Knowledge Acquisition from Social Platforms Based on Network Distributions Fitting. Computers in Human Behavior, 2015. doi:10.1016/j.chb.2014.12.015
9. Musiał K., Bródka P., Kazienko P., Gaworecki J.: Extraction of Multi-layered Social Networks from Activity Data. The Scientific World Journal. Volume 2014 (2014), Article ID 359868, 13 pages.
10. Michalski R., Kajdanowicz T., Bródka P., Kazienko P.: Seed Selection for Spread of Influence in Social Networks: Temporal vs. Static Approach. New Generation Computing, Vol. 32, Nos. 3-4, 2014, pp. 213-235.
11. Bródka P., Saganowski P., Kazienko P.: **GED: The Method for Group Evolution Discovery in Social Networks**, Social Network Analysis and Mining, March 2013, Volume 3, Issue 1, pp 1-14,
12. Saganowski S., Bródka P., Kazienko P.: **Influence of the User Importance Measure on the Group Evolution Discovery**. Foundations of Computing and Decision Sciences, Volume 37, Issue 4, Pages 293-303, 2012.
13. Bródka P., Kazienko P., Musiał K., Skibicki K., **Analysis of Neighbourhoods in Multi-layered Dynamic Social Networks**. International Journal of Computational Intelligence Systems, vol. 5, no. 3, 2012 pp. 582-596, **Impact Factor 1,471**
14. Zygmunt A., Bródka P., Kazienko P., Koźlak J.: **Key Person Analysis in Social Communities within Blogosphere**. Journal of Universal Computer Science, vol. 18, no. 4, 2012, pp. 577-597 **ImpactFactor 0.762**
15. Filipowski T., Kazienko P., Bródka P., Kajdanowicz T.: **Web-based knowledge exchange through social links in the workplace**. Behaviour and Information Technology 2012, vol. 31, issue 8, pp. 779-790, **ImpactFactor 0.856**
16. Kukla G., Kazienko P., Bródka P., Filipowski T.: **SocLaKE - Social Latent Knowledge Explorator**, The Computer Journal, Vol. 55 No. 3, 2012, pp. 258-276 **ImpactFactor 0.755**
17. Palus S., Bródka P., Kazienko P.: **Evaluation of Organization Structure based on Email Interactions**. International Journal of Knowledge Society Research, Vol. 2, No. 1, 2011, pp. 1-13. .
18. Kazienko P., Ruta D., Bródka P.: **The Impact of Customer Churn on Social Value Dynamics**. International Journal of Virtual Communities and Social Networking, Special Issue on "Formation and Dynamics of Virtual Communities", 1(3), July-September 2009, 60-72.

INTERNATIONAL CONFERENCES

19. Lim Choi Keung S.N, Zhao L., Curcin V, Ethier J-F., Burgun A., McGilchrist M., Bródka P., Tuligłowicz W., Andreasson A., Delaney B.C., Arvanitis T.N. TRANSFoRm: Implementing a Learning Healthcare System in Europe through Embedding Clinical Research into Clinical Practice, ICSS2014 - 48th Annual Hawaii International Conference on System Sciences, IEEE Computer Society Press
20. Bródka P., Sobas M., Johnson H.: Profile Cloning Detection in Social Networks. The First European Network Intelligence Conference, September 29-30, 2014, Wrocław, Poland, IEEE Computer Society, pp. 63-68
21. Michalski R., Jankowski J., Bródka P., Kazienko P.: The Same Network - Different Communities? The Multidimensional Study of Groups in the Cyberspace. SNAA 2014 - the 4th Workshop on Social Network Analysis in Applications at ASONAM 2014 - The 2014 IEEE/ACM International Conference on Advances in Social Network Analysis and Mining, Beijing, China, August 17-20, 2014, IEEE Computer Society, 2014,
22. Michalski R., Kazienko P., Kajdanowicz T., Bródka P.: Data-driven Seed Selection for Spread of Influence in Temporal Social Networks. Workshop on Sociophysics at SigmaPhi 2014 - The International Conference on Statistical Physics 2014, Rhodes, Greece, July 7-11, 2014, Kaniadakis G., Scarfone A.M. (eds.), 2014, p. 75.
23. Saganowski S., Gliwa B., Bródka P., Zygmunt A., Kazienko P., Koźlak J.: Predicting Community Evolution in Social Networks, poster. NetSci 2014 - International School and Conference on Network Science
24. Michalski R., Kajdanowicz T., Bródka P., Kazienko P.: Seed Selection in Social Networks - Temporal Approach Benefits. TnetSphys'14 - Temporal Networks, Human Dynamics and Social Physics Symposium at NetSci 2014 - International School and Conference on Network Science
25. Frączkowski K., Bródka P., Misiaszek A., Saganowski S., Kazienko P.: The mobile system supporting health safety of patients in the TRANSFoRm project. Workshop: CRI Solution Day

26. Brodka P, Kazienko P, Andreasson A, Fraczkowski K, Misiaszek A, Saganowski S, Zhao L, Curcin V, Arvanitis T, Delaney B, Michalski R.: Remote Patient Health Condition Monitoring for Clinical Research. 19th WONCA Europe Conference, Lisbon, 3 July 2014.
27. Curcin V, Arvanitis T, Ethier J-F, Fraczkowski K, Kazienko P, Brodka P, Andreasson A, Blizniuk G, Lim Choi Keung S, Zhao L, Misiaszek A, McGilchrist M, Burgun A, Delaney B. Semantic Approach to Achieving Interoperability between Clinical Care and Clinical Research. 19th WONCA Europe Conference, Lisbon, 3 July 2014.
28. Curcin V., Arvanitis T.N., Brodka P., Corrigan D., Delaney B.: TRANSFoRm digital infrastructure: The architecture for The Learning Healthcare System in Europe AMIA 2014 Clinical Research Informatics SummitPanel
29. Gliwa B., Bródka P., Zygmunt A., Saganowski S., Kazienko P., Koźlak J.: Different Approaches to Community Evolution Prediction in Blogosphere. SNAA 2013 at ASONAM 2013, IEEE Computer Society, 2013, pp.
30. Kazienko P., Kajdanowicz T., Michalski R., Bródka P.: From Data to Human Behaviour. SOCIETY 2013, IEEE Computer Society, 2013, pp.
31. Kajdanowicz T., Filipowski T, Kazienko P., Bródka P. Competence Region Modelling in Relational Classification ACIIDS 2013, LNCS 7803, 2013, pp 236-244,
32. Bródka P., Kazienko P., Kołoszczyk B.: **Predicting Group Evolution in the Social Network**. SocInfo 2012 - The 4th International Conference on Social Informatics, 5-7 December 2012, Lausanne, Switzerland, LNCS 7710, Springer, 2012, pp. 54-67. .
33. Michalski R., Bródka P., Kazienko P., Juszczyszyn K.: **Quantifying Social Network Dynamics**. CASoN 2012 - The 4th International Conference on Computational Aspects of Social Networks, November 21-23, 2012, Sao Carlos, Brasil, IEEE Computer Society, 2012, pp. 69-74.
34. Saganowski S., Bródka P., Kazienko P.: **Influence of the Dynamic Social Network Timeframe Type and Size on the Group Evolution Discovery**. ASONAM 2012 - The 2012 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, 26-29 August, 2012, Istanbul, Turkey, IEEE Computer Society, 2012, pp. 678-682,
35. Gliwa B., Saganowski S., Zygmunt A., Bródka P., Kazienko P., Koźlak J.: **Identification of Group Changes in Blogosphere**. ASONAM 2012 - The 2012 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, 26-29 August, 2012, Istanbul, Turkey, IEEE Computer Society, 2012, pp. 1233-1238.
36. Bródka P., Filipowski T., Kazienko P.: **An Introduction to Community Detection in Multi-layered Social Network**. WSKS 2011, Springer, CCIS 278, pp 185-190, 2012. .
37. Bródka P., Skibicki K., Kazienko P., Musiał K.: **A Degree Centrality in Multi-layered Social Network**. CASoN 2011, The International Conference on Computational Aspects of Social Networks Salamanca, Spain, October 19-21, 2011, IEEE Computer Society, 2011, pp. 237-242
38. Bródka P., Saganowski P., Kazienko P.: **Tracking Group Evolution in Social Networks**. SocInfo'11, The Third International Conference on Social Informatics, 6-8 October, 2011, Singapore, Lecture Notes in Artificial Intelligence LNAI , Springer, 2011, pp. 316-319. **Best Demo\Poster\Paper Award, Student Travel Support Award** ,
39. Michalski R., Bródka P, Palus S., Kazienko P., Juszczyszyn K.: **Modelling Social Network Evolution**. SocInfo'11, The Third International Conference on Social Informatics, 6-8 October, 2011, Singapore, Lecture Notes in Artificial Intelligence LNAI , Springer, 2011, pp. 283-286,
40. Bródka P., Saganowski S., Kazienko P.: **Group Evolution Discovery in Social Networks**. ASONAM 2011, The 2011 International Conference on Advances in Social Network Analysis and Mining, Kaohsiung, Taiwan, 25-27 July 2011, IEEE Computer Society, 2011, pp. 247-253
41. Bródka P., Stawiak P., Kazienko P.: **Shortest Path Discovery in the Multi-layered Social Network**. ASONAM 2011, The 2011 International Conference on Advances in Social Network Analysis and Mining, Kaohsiung, Taiwan, 25-27 July 2011, IEEE Computer Society, 2011, pp. 497-253
42. Zygmunt A., Bródka P., Kazienko P., Koźlak J.: **Different Approaches to Groups and Key Person Identification in Blogosphere**. SNAA 2011, The First Workshop on Social Network Analysis in Applications, at ASONAM 2011, The 2011 International Conference on Advances in Social Network Analysis and Mining, Kaohsiung, Taiwan, 25-27 July 2011, IEEE Computer Society, 2011, pp. 593-598
43. Kazienko P., Musiał K., Kukla E., Kajdanowicz T., Bródka P.: **Social Network: Model and Analysis**. ICCCI 2011, The 3rd International Conference on Computational Collective Intelligence - Technologies and Applications, 21-23 September 2011, Gdynia, Poland, Lecture Notes in Artificial Intelligence LNAI , Springer, 2011, pp. 378-387
44. Kazienko P., Kukla E., Musiał K., Kajdanowicz T., Bródka P., Gaworecki J.: **A Generic Model for Multidimensional Temporal Social Network**. ICeND2011, The First International Conference on e-Technologies and Networks for Development, Dar-es-Salaam, Tanzania, August 3-5, 2011, Communications in Computer and Information Science, Springer, 2011, pp. 1-14
45. Popowicz D., Bródka P., Kazienko P., Kozielski M.: **Ask Your Friends for Help: A Collaborative Query Answering System**. CDVE2011, The 8th International Conference on Cooperation Design Visualisation and Engineering, Hong Kong, China, September 11-14, 2011, Lecture Notes in Computer Science, Springer, 2011, pp. 110-113.
46. Kukla G., Kazienko P., Bródka P., Filipowski T.: **Recommendation Boosted Query Propagation in the Social Network**. SocInfo'2010, The Second International Conference on Social Informatics, 27-29 October, 2010, Laxenburg, Austria, Lecture Notes in Artificial Intelligence LNAI , Springer, 2010, pp. 113-124. .
47. Kazienko P., Bródka P., Musiał K., Gaworecki J.: **Multi-layered Social Network Creation Based on Bibliographic Data**, The Second IEEE International Conference on Social Computing (SocialCom2010), August 20-22, 2010, Minneapolis, IEEE Computer Society Press, USA 2010, pp. 407-412 .
48. Juszczyszyn K., Musiał A., Musiał K., Bródka P.: **Utilizing Dynamic Molecular Modelling Technique for Predicting Changes in Complex Social Networks**, 2010 IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology, 2010 Collective Intelligence in Semantic Web and Social Networks Workshop, 31 August - 3 September 2010, Toronto, Canada, IEEE Computer Society Press, 2010, pp. 1-4.
49. Kazienko P., Bródka P., Musiał K.: **Individual Neighbourhood Exploration in Complex Multi-layered Social Network**, 2010 IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology, 2010 Collective Intelligence in Semantic Web and Social Networks Workshop, 31 August - 3 September 2010, Toronto, Canada, IEEE Computer Society Press, 2010, pp. 5-8.

50. Bródka P., Musiał K., Kazienko P.: **A Method for Group Extraction in Complex Social Networks**. WSKS 2010, The 3rd World Summit on the Knowledge Society, Corfu, Greece, September, 22-24, 2010, Communications in Computer and Information Science, CCIS 111, Springer, 2010, pp. 238-247. .
51. Palus S., Bródka P., Kazienko P.: How to Analyze Company Using Social Network? WSKS 2010, The 3rd World Summit on the Knowledge Society, Corfu, Greece, September, 22-24, 2010, Communications in Computer and Information Science, CCIS 111, Springer, 2010, pp. 159-164. .
52. Bródka P., Musiał K., Kazienko P.: **Efficiency of Node Position Calculation in Social Networks**. 13th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems, KES 2009, Session on Social Networks, September 28-30, 2009, Santiago, Chile, Lecture Notes in Computer Science, LNCS/LNAI, Springer, 2009, pp.455-463. .
53. Bródka P., Musiał K., Kazienko P.: **A Performance of Centrality Calculation in Social Networks**. International Conference on Computational Aspects of Social Networks, CASoN 2009, June 24-27, 2009, Fontainebleau, France, IEEE Computer Society, 2009, pp.24-31.
54. Musiał K., Kazienko P., Bródka P.: **User Position Measures in Social Networks**. The third SNA-KDD Workshop on Social Network Mining and Analysis held in conjunction with The 13th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, KDD 2009, June 28, 2009, Paris France, ACM Press, 2009, pp. 1-9.
55. Ruta D., Kazienko P., Bródka P.: **Network-Aware Customer Value in Telecommunication Social Networks**. The 2009 International Conference on Artificial Intelligence, ICAI'09, July 13-16, 2009, Las Vegas, Nevada, USA, CSREA Press, pp. 261-267.
56. Kazienko P., Bródka P., Ruta D.: **The Influence of Customer Churn and Acquisition on Value Dynamics of Social Neighbourhoods**. The 2nd World Summit on the Knowledge Society, WSKS 2009, September, 16-18, 2009, Crete, Greece, Lecture Notes in Computer Science, LNCS/LNAI, Springer, 2009, pp.491-500.
57. Juszczyszyn K., Musiał A., Musiał K., Bródka P.: **Molecular Dynamics Modelling of the Temporal Changes in Complex Networks**, IEEE Congress on Evolutionary Computation, CEC'09, Trondheim, Norway, IEEE Computer Society Press, 2009 pp. 553-559.

POLISH NATIONAL CONFERENCES

58. Bródka P., Kaim K.: **Badanie logów serwera Politechniki Wrocławskiej metodami eksploracji danych**, Oficyna Wydawnicza Politechniki Wrocławskiej, V Konferencja naukowa studentów Referaty Tom 1, str. 49-54.
59. Bródka P.: **Indeksowanie obiektów wielowymiarowych**, Oficyna Wydawnicza Politechniki Wrocławskiej, IV Konferencja naukowa studentów, Referaty Tom 1, str. 79-84.