

Marcin Witkowski

Adam Mickiewicz University

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PERSONAL INFORMATION

Date of Birth November 06, 1985
Place of Birth Poznań, Wielkopolska, Poland
Nationality Polish

EDUCATION AND EMPLOYMENT

10.2015– now **Adam Mickiewicz University.**
Position Adiunkt

08.2014–
07.2015 **University of Oxford.**
Position Visiting Postdoctoral Researcher

2009–2014 **Ph.D. studies in Mathematics (Discrete Mathematics),**
Adam Mickiewicz University, Poland.
Supervisor: Tomasz Łuczak,
Thesis *Properties of random coverings of graphs*

2004–2009 **Master of Science in Mathematics,**
Adam Mickiewicz University, Poland.
Thesis *Low dimensional posets and their applications*

2007–2009 **Master of Science in Computer Science,**
Poznan University of Technology, Poland.
Thesis *A game-theory approach to scheduling problems*

2004–2007 **Bachelor of Science in Computer Science,**
Poznan University of Technology, Poland.
Thesis *TOTH - central repository for logs in distributed systems*

SCHOLARSHIPS, GRANTS AND AWARDS

2015 Participant in TransFormation.doc - 2 week soft-skills training for 500 best Polish young scientists organised by Polish Ministry of Science

2014-2015 An Integrated Development program of Adam Mickiewicz University in Poznan, „Advanced Technologies for the Development of Highly Qualified Employees for the National Economy” - 102 500,00 PLN

2012 National Science Center Grant (PRELUDIUM) - 33 800,00 PLN
„Properties of random coverings of graphs“ - 2011/03/N/ST1/00426

2009-2013 Participant of the HCP Programme for Ph.D. students called ŚSDNM.

2009 Dean’s Awards for Academic Accomplishment, Adam Mickiewicz University.

2005-2009 University Scholarship (Top 20%) from both Adam Mickiewicz University and Poznan University of Technology

INTERNSHIPS AND VISITS

- Jun, 2017 *Summer School on Random Graphs and Probabilistic Methods* Toronto, Canada (2 weeks).
- Jul, 2016 *Sao Paulo School of Advanced Science on Algorithms, Combinatorics and Optimization* Sao Paulo, Brazil (2 weeks).
- Aug 2015 Ivey Business School - London, Canada. Transformation.doc training (2 weeks).
- Aug 2014 - July 2015 University of Oxford - Oxford, UK. Visiting postdoctoral researcher (12 months).
- Jan 2014 Eindhoven University of Technology - Eindhoven, Holland. As a part of: „EURANDOM - Stochastic Activity Month on Combinatorics and Probability” (2 weeks).
- Sep 2013 University of Graz - Graz, Austria. Fall school: *Fall School on „Phase Transition in Random Discrete Structures”* (3 weeks).
- Feb 2012 - Mar 2012 Freie Universitat - Berlin, Germany. Spring school: *Block Course: „Extremal Combinatorics in Random Discrete Structures”* (4 weeks).
- Sep 2010 - Feb 2011 Jagiellonian University - Cracow, Internship as a part of SSDNM program (6 months)

LANGUAGES

- Polish Fluent (mother tongue)
- English CAE level (Certificate)
- German basics

PUBLICATIONS

Submitted

- Algorithms *Distributed algorithms for k -dominating set in bounded genus graphs and linklessly embeddable graphs - extended version*, A. Czygrinow, M. Hanckowiak, W. Wawrzyniak and **M. Witkowski**, submitted.

2019

- Algorithms *Distributed CONGEST BC constant approximation of MDS problem in bounded genus graphs 201? Accepted in Theoretical Computer Science*, A. Czygrinow, M. Hańćkowiak, W. Wawrzyniak, **M. Witkowski**, Theoretical Computer Science Volume 757, 24 January 2019, Pages 1-10

2018

- Algorithms *Distributed approximation algorithms for the Minimum Dominating Set in K_h -minor-free graphs*, A. Czygrinow, M. Hańćkowiak, W. Wawrzyniak, **M. Witkowski**, ISAAC 2018

2017

- Algorithms *Distributed algorithms for k -dominating set in bounded genus graphs and linklessly embeddable graphs.*, A. Czygrinow, M. Hanckowiak, W. Wawrzyniak and **M. Witkowski**, ICTCS 2017

- Graph Theory *On Cops and Robbers on G^{Ξ} and cop-edge critical graphs.*, D.M. Cardoso, C. Dominic, Ł.Witkowski, and **M. Witkowski**, Contributions to Discrete Mathematics
- Graph Theory *A short note on cops and robber playing on total graph.*, D.M. Cardoso, C. Dominic, Ł.Witkowski, and **M. Witkowski**, Asian Journal of Mathematics and Computer Research 16 (1), (2017), pp. 2395-4205
- Algorithms *Improved distributed local approximation algorithm of the minimum 2-dominating set in planar graphs.*, A. Czygrinow, M. Hanckowiak, E. Szymanska, W. Wawrzyniak, **M.Witkowski**, Theoretical Computer Science, Vol 662, (2017), pp.1-8
- 2015
- Graph Theory *Hamilton cycles in random lifts of graphs*, T. Łuczak, Ł. Witkowski and **M. Witkowski**, European Journal of Combinatorics, Vol 49 (2015), pp. 105-116
- 2014
- Algorithms *Distributed local approximation of the minimum k -tuple dominating set in planar graphs.*, A. Czygrinow, M. Hanckowiak, E. Szymanska, W. Wawrzyniak, **M.Witkowski**, OPODIS 2014 (2014)
- 2013
- Graph Theory *Random lifts of graphs are highly connected*, **M. Witkowski**, Electronic Journal of Combinatorics 20(2) (2013)
- Algorithmic Game Theory *Approximate Strong Equilibria in Job Scheduling Games: an Analysis for Two Uniformly Related Machines*, L. Epstein, M. Feldman, T. Tamir, Ł. Witkowski and **M. Witkowski**, Discrete Applied Mathematics 161 (2013), pp. 1843-1858
- 2011
- Combinatorics *Nonrepetitive sequences on arithmetic progressions*, J. Grytczuk, J. Kozik and **M. Witkowski**, Electronic Journal of Combinatorics 18(1) (2011)

SELECTED TALKS AND PRESENTATIONS

- May, 2021 „Adjacency poset of outerplanar graphs” CanaDAM 2021, Online
- May, 2019 „Finding mimimum dominating set in a graph” Berlin-Poznan-Hamburg-Warsaw Seminar, Warsaw, Poland
- Feb, 2019 „Finding mimimum dominating set in a graph” International Conference on Emerging Trends in Graph Theory, Bangalore, India
- Invited Talk
- Jul, 2017 „Distributed algorithms for minimum dominating set problem” Novi Sad Workshop on Foundations of Computer Science , Novi Sad, Serbia
- Sep, 2016 „Cops and Robber games on G^{Ξ} ”, 6th Polish Combinatorial Conference, Bedlewo, Poland
- May, 2015 „Random lifts of graphs”, Discrete Mathematics and Optimization Seminar McGill University, Montreal

- May, 2015 „Cops and Robber games on G^Ξ ”, Discrete Math Days and Ontario Combinatorics Workshop, Ottawa
- Dec, 2014 „Distributed local approximation of the minimum k -tuple dominating set in planar graphs”, Opodis 2014, Cortina d'Ampezzo
- Jan, 2014 „Hamilton cycles in random lifts of graphs”, EURANDOM Probability and Graphs, Eindhoven
- Sep, 2013 „Random lifts of graphs”, Mini-Workshop "Phase Transition in Random Graphs", Graz
- Mar, 2012 „Random lifts of graphs”, Miniconference during Block Course: Extremal Combinatorics in Random Discrete Structures, Berlin
- Aug, 2011 „Lifts of graphs”, Summer School in Random Geometry, Reykjavik
- Jun, 2011 „Topological cliques in random lifts of graphs”, Berlin-Poznan Seminar, Będlewo
- Dec, 2010 „Load balancing games”, Winter workshop on Game Theory, Cracow
- Jul, 2010 „Random graph coverings: connectivity”, DIMAP Workshop on Extremal and Probabilistic Combinatorics, Petersfield

SELECTED WORKSHOPS AND CONFERENCES

- Jul, 2016 *Sao Paulo School of Advanced Science on Algorithms, Combinatorics and Optimization* Sao Paulo, Brazil
- May, 2015 *Discrete Math Days and Ontario Combinatorics Workshop* Ottawa, Canada
- Dec, 2014 *Opodis 2014* Cortina d'Ampezzo, Italy
- Jan, 2014 *EURANDOM - Probability and Graphs* Eindhoven, Netherlands
- Sep, 2013 *Fall School on "Phase Transition in Random Discrete Structures"* Graz, Austria
- Aug, 2013 *Random Graphs, Geometry and Asymptotic Structure* Birmingham, England
- Aug, 2013 *Workshop: Order and Geometry* Berlin, Germany
- Nov, 2012 *STAR Workshop on Random Graphs* Utrecht, Holland
- Aug, 2012 *4th Emlektabla Workshop* Budapest, Hungary
- Jul, 2012 *6th European Congress of Mathematics* Krakow, Poland
- Mar, 2012 *Block Course: Extremal Combinatorics in Random Discrete Structures*, Berlin, Germany
- Sty, 2012 *Winter School around the Fourier-Entropy-Influence conjecture*, Paris, France
- Aug, 2011 *Summer School in Random Geometry*, Reykjavik, Iceland
- Jul, 2011 *Combinatorics Conference in Lisboa*, Lizbon, Portugal
- Jun, 2011 *Modern Graph Theory with applications to Geometric Group Theory*, Będlewo, Poland
- May, 2011 *The 15th International Conference on Random Structures and Algorithms*, Atlanta, USA
- Dec, 2010 *Winter workshop on Game Theory*, Cracow, Poland
- Nov, 2010 *3rd Polish Combinatorial Conference*, Będlewo, Poland
- Jul, 2010 *DIMAP Workshop on Extremal and Probabilistic Combinatorics*, Petersfield, England
- Aug, 2009 *The 14th International Conference on Random Structures and Algorithms*, Poznań, Poland
- Sep, 2008 *2nd Polish Combinatorial Conference*, Będlewo, Poland

SCIENTIFIC INTERESTS

- Graph Theory Random Graphs, Graphs Coverings, Graph Dimension
- Game Theory Congestion Games, Scheduling Games

Combinatorics Nonrepetitive Sequences, Posets
Algorithms Graph Algorithms, Random Algorithms

REVIEWS

Journals Random Structures and Algorithms, Discrete Mathematics, Electronic Journal of Combinatorics, Proyecciones Journal of Mathematics
Conferences DISC'17, DISC'20

TEACHING

AMU „Object-oriented programming”, „Algorithms and programming”, „Computer Networks”, „Computer Systems”, „Databases”, „Introduction to computer science”, „Introduction to programming”, „Engineer projects”

WORKING EXPERIENCE

Operating Systems

All Microsoft™ operating systems, Linux

Programming Languages

Procedural C, Pascal
Object-Oriented C++, Java, Object Pascal
Visual Visual C++
Logic Prolog
Functional OCaml

Office Automation

T_EX, L^AT_EX, Microsoft Office™

MEMBERSHIPS

IX 2014-VII 2015 Mansfield College SCR - Oxford
IX 2014-VII 2015 Oxford University Polish Society (POLSOC)
IX 2014-II 2015 Grand National Archery Society (Archery GB)
IX 2006-IX 2008 Association for Computing Machinery (ACM)

EXTRACURRICULAR ACTIVITIES

Jun, 2019 Organiser of "Workshop in Structural Graph Theory" in Gułtowy
Mar, 2016 SamurAI coding 2015-2016 programming competition - 3rd place in a team with Lukasz Witkowski and Dominika Kubijk
Feb, 2015 Participating in VII Congress of Polish Student Societies in the United Kingdom, Lancaster-Manchester, UK
Dec, 2014 Participating in BSG 2014 Challenges of Government Conference, Oxford, UK
2011-2014 Organiser and Judge at VI,VII,VII,IX Great Poland Programming Contest
Feb, 2014 Organiser of Cloud Community Conference
Dec, 2010 Organiser and Judge at XV, XIV Polish Regional Programming Contest
Oct, 2007/2008 Participant in ACM, Central European Programming Contest, Wroclaw, Praha
Nov, 2007 Volunteer work: 3rd Language & Technology Conference

OTHER INTERESTS

- Sports Archery, Football, Volleyball, Snooker, Tennis, Badminton, Table Tennis
- Algorithms Solving problems, inventing and implementing algorithms
- Books Dystopias, Fantasy books, Crime books

UPDATED

June 01, 2019