# CURRICULUM VITÆ

### Personal data



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### Education and degrees

2020 Title of professor

2011 Habilitation Degree, University of Warsaw

2005 Ph.D. in Computer Science, University of Warsaw

Ph.D. Thesis Algorithmic Path Problems in Planar Graphs (advisor: Krzysztof Diks)

1996 – 2001 M.Sc. in Computer Science, University of Warsaw

M.Sc. Thesis *Three-coloring Planar Graphs* (advisor: Krzysztof Diks)

1996 – 1999 B.Sc. in Mathematics, University of Warsaw

1992 – 1996 – II LO im. Stefana Batorego, Warsaw

### Positions and long-term stays

2020 – University of Warsaw, full professor (profesor)

2012 – 2020 University of Warsaw, associate professor (prof. nadzwyczajny)

2005 – 2012 University of Warsaw, assistant professor (adiunkt)

2005 – 2006 Max-Planck Institut für Informatik, Saarbrücken, postdoctoral researcher

2003 Marie-Curie Fellowship, BRICS, Aarhus University, Denmark.

## Awards and Funding

#### Selected Awards and Scholarships:

Sep 2017 Best Paper Award, 25th European Symposium on Algorithms Nov 2014 Nagroda MNiSW za osiągnięcia w opiece naukowej i dydaktycznej

 $2011\text{-}2014 \qquad \quad \text{Scholarship for outstanding young scientists (MNiSW)}$ 

Jun 2007 Witold Lipski Prize for Young Researchers in Computer Science

#### Research grants:

- 2014–2017 Grant of National Science Centre Current trends in parameterized and exponential-time algorithms, principal investigator
- 2011–2014 Grant of National Science Centre Parameterized complexity and exponential-time algorithms, principal investigator
- 2009–2010 Polish-Slovenian bilateral project Partitions and structures of graphs, coordinator
- 2008–2009 Polish-Slovenian bilateral project Graph colorings and their applications, coordinator
- 2007–2009 Grant of Ministry of Science and Higher Education New techniques in graph algorithms:
  exact algorithms for NP-hard problems, sparse graphs and their applications, principal
  investigator
- 2005 PhD Grant of Ministry of Science and Higher Education, Algorithmic path problems in planar graphs

#### Service

#### PC and editorial service

- Program committee chair of WG 2021.
- Program committee member of MFCS 2021.
- Program committee chair of PACE 2020 (an algorithm engineering competition).
- Program committee member of IPEC 2020.
- Program committee member of EUROCOMB 2020.
- Program committee member of WG 2020.
- Program committee member of MFCS 2020.
- Program committee member of ESA 2018.
- Managing Editor in Information Processing Letters (from November 2017 to June 2019)
- Editor in Information Processing Letters (2010-2016); Associate editor from 2019
- Program committee member of MEMICS 2014, 2015.
- Program committee member of MFCS 2011.
- Reviewer for conferences DISC, ESA, FCT, FSTTCS, ICALP, IPEC, MFCS, PODS, SIROCCO, SODA, STOC, STACS, SWAT, WADS.
- Reviewer for journals Algorithmica, Ars Combinatoria, ACM Transactions on Algorithms, Applied Mathematics Letters, Discrete Applied Mathematics, Discrete Mathematics, Fundamenta Informaticae, Graphs and Combinatorics, Information Processing Letters, Journal of Combinatorial Mathematics and Combinatorial Computing, Journal of Discrete Algorithms, Journal of Graph Theory, Optimization Letters, Theoretical Computer Science.

#### Invited talks (selected)

• Algebraic methods in parameterized graph algorithms, Bordeaux Graph Workshop, 2019.

• Finding long paths by evaluating a polynomial (tutorial), Bonn, Workshop Combinatorial Optimization meets Parameterized Complexity, 2016

#### Administration

- Director of Institute of Informatics (2020-2024).
- Vice-director of Institute of Informatics (2016-2020).

#### **Events**

2021	organizer of WG 2021 (as an on-line conference).
2020	organizer (chair) of PACE 2020 (an algorithm engineering competition).
2013	organizer of WorKer (Workshop on Kernels)
2006 – 2012	organizer of "Open Lectures for PhD Students" (Warsaw Univ.)
2004	organizer of "PhD Student Day" (a mini-conference for PhD students)
2002	member of the organizing committee, 27th International Symposium on Mathematical Fo- undations of Computer Science (MFCS 2002)

### Programming contests

2008-2009	Polish Olympiad in Informatics (chair of the local committee in Warsaw)
2001-2006	Polish Olympiad in Informatics (jury member, author of tasks)
2005	International Olympiad in Informatics (Host Scientific Committee member)
2004	Central-European Olympiad in Informatics (jury member)
2003, 2004	ACM Central European Programming Contest (jury member)

# Publications (as of Sept 2021)

- a textbook *Parameterized Algorithms*, with Marek Cygan, Fedor V. Fomin, Daniel Lokshtanov, Dániel Marx, Marcin Pilipczuk, Michał Pilipczuk, Saket Saurabh, Springer 2015.
- 29 journal articles, including ACM Trans. Algorithms, SIAM J. Discr. Math., J. Artif. Intell. Res.
- 34 conference articles, including STOC, SODA, ICALP, ESA.

The complete list of publications can be found at DBLP.

### Advising and Teaching

**PhD advisor:** Marek Cygan (2012), Marcin Pilipczuk (2012), Arkadiusz Socała (2017), Konrad Majewski (ongoing).

M.Sc. advisor: Piotr Ambroszczyk (2021), Konrad Majewski (2020), Kamil Żyła (2019), Katarzyna Zalewska (2017), Katarzyna Jabłonowska (2016), Arkadiusz Socała (2014), Mateusz Baranowski (2013), Michał Pilipczuk (2013), Piotr Kufel (2012), Michał Pachucki (2011), Łukasz Bieniasz-Krzywiec (2010), Piotr Cerobski (2010), Mateusz Wykurz (2008), Marek Cygan (2008), Marcin Pilipczuk (2008).

#### Lecturer (summer schools, longer tutorials, etc.):

2017	Introduction to Parametrized Algorithms (1-day course for Gdańsk Summer School of Advan-
	ced Science on Algorithms for Discrete Optimization ), Gdańsk Technical University.
2015	FPT and exponential algorithms (2-day course for PhD students). University of Wrocław

FPT and exponential algorithms (2-day course for PhD students), University of Wrocław.

2013 Algebraic techniques in parameterized complexity, School on parameterized algorithms and complexity, Będlewo.

2013 Algebraic approach to exact algorithms, ADFOCS 2014, MPI Saarbruecken.

2012 Algebraic approach to exact algorithms, tutorial at PCC 2012.

Exact Algorithms for NP-hard problems, tutorial at PhD Open, Warsaw. 2010

#### Lecturer (full semester courses at University of Warsaw):

yearly from 2007	Algorithmics
2019	Parameterized algorithms
2013	Algorithmic tools
2010	Probabilistic methods in algorithms
2007	$Approximation \ Algorithms$
2007	Analysis of Algorithms
2006	Advanced Data Structures
2001,2003,2004	local-loc

# Popular Science

2021	Lecture Po co programiście chaos?, Maraton wykładowy Delty
2020	Popular article $Problem\ komiwojażera\ w\ praktyce,$ Delta, 2 / 2020.
	Lecture Problem komiwojażera w praktyce, Staszic High School summer camp.
2019	Lecture Problem komiwojażera, Festival of Science.
2018	Popular article $Problem\ izomorfizmu\ grafów,$ Delta, 12 / 2018.
2017	Lecture Wstęp do aproksymacji, Workshop of National Children's Fund.
2016	Lecture Drzewa Gomory-Hu, Workshop of National Children's Fund.
2014	Lecture O problemie komiwojażera, Festival of Science.
	Lecture <i>Haszowanie</i> , Workshop of National Children's Fund.
2013	Lecture O problemie k-ścieżki, Workshop of National Children's Fund.
	Popular article $Programy\ liniowe,\ gry\ i\ algorytmy,\ Delta,\ 8\ /\ 2013.$
2012	Lecture Drzewa Gomory-Hu, Workshop of National Children's Fund.
2010	Lecture Czy można programować w języku układów równań liniowych?, Festival of Science.
	Lecture Problem Lasu Steinera, Workshop of National Children's Fund.
2009	Lecture Złożoność parametryzowana, Workshop of National Children's Fund.
2008	Popular article $O$ notacji asymptotycznej w analizie algorytmów, Delta, 1 / 2008, str. 4-5.
2006	Lecture Jak trudne są problemy NP-trudne?, Workshop of National Children's Fund.
2005	Lecture Siedem cudów informatyki, Festival of Science.

- Lecture Grafowe twierdzenie o minorach: porządkowanie grafów, Grzegorzewice 29.08.2005, XXXV Szkoła Matematyki Poglądowej "Porządek".
- 2004 Lecture  $Derandomizacja \ alorytmów,$ XXXIII Szkoła Matematyki Poglądowej, Grzegorzewice.
- 2002 Popular article Spacery po mostach i przejażdżki po mieście, Software 2.0, 7 / 2002.