

Adam Zsolt Wagner

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PROFESSIONAL EXPERIENCE	<i>GOOGLE DEEPMIND</i> Research Engineer	2024 - present
	<i>WORCESTER POLYTECHNIC INSTITUTE</i> Assistant professor, mathematics (tenure track)	2022 - present
	<i>GOOGLE DEEPMIND</i> Consultant	2022 - present
	<i>TEL AVIV UNIVERSITY</i> Postdoc, advisors: Prof. Asaf Shapira and Prof. Wojciech Samotij	2020 - 2022
	<i>ETH ZÜRICH</i> Postdoc, advisor: Prof. Benny Sudakov	2018 - 2020
EDUCATION	<i>UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN</i> PhD, advisor: Prof. József Balogh Thesis topic: combinatorics, graph theory	2014 - 2018
	<i>UNIVERSITY OF CAMBRIDGE</i> Master of Mathematics Final exam result: High Distinction	2013 - 2014
	<i>UNIVERSITY OF CAMBRIDGE</i> B.A. (Hons.) in Mathematics	2010 - 2013
INVITED SEMINAR TALKS	Harvard: 2024 York University: 2024 MIT: 2024 Rutgers Experimental Mathematics Seminar: 2024 Brandeis University: 2024 UMass Lowell: 2024 Carnegie Mellon University: 2023 Aarhus University: 2022, 2023 University of Waterloo: 2022 Heidelberg University: 2022 DeepMind: 2022 Eindhoven University of Technology: 2022 University of Sydney: 2022 Freie Universität Berlin: 2022 Worcester Polytechnic Institute: 2022, 2023, 2024 Harvard University: 2021 University of California, San Diego: 2021 Georgia Institute of Technology: 2021 Rényi Institute: 2021 University of South Carolina: 2021 Jagiellonian University: 2021 Tel Aviv University: 2020 IBS Korea: 2020, 2021 University of Amsterdam: 2020 University of Warwick: 2019 ETH Zürich: 2018, 2019 University of Oxford: 2017	

University of Cambridge: 2017
 London School of Economics: 2017
 Goethe University Frankfurt: 2017
 Freie Universität Berlin: 2017
 UIUC: 2014, 2015, 2016, 2017, 2019, 2020, 2021
 Western Michigan University: 2016
 University of Birmingham: 2016
 Illinois State University: 2016
 Iowa State University: 2016

CONFERENCE TALKS

- *Reinforcement learning and pattern finding* 2024
 Mathematics and Machine Learning Program, Harvard CMSA
- *Reinforcement learning and pattern finding* 2024
 Diagrammatic Intuition and Deep Learning in Mathematics, York University
- *Applications of machine learning in mathematics* 2023
 Mathematics and Machine Learning, Caltech
- *AI to Assist Math Reasoning* 2023
 National Academies workshop
- *Finding counterexamples to conjectures via reinforcement learning* 2023
 IPAM Workshop for Machine Assisted Proofs
- *Constructions in combinatorics via neural networks* 2021
 Young Researchers in Extremal and Probabilistic Combinatorics, online
- *Completion and deficiency problems* 2019
 BIRS Workshop on Probabilistic and Extremal Combinatorics, Banff
- *The largest projective cube-free subsets of \mathbb{Z}_2^n* 2019
 Random Structures and Algorithms, Zürich
- *The largest projective cube-free subsets of \mathbb{Z}_2^n* 2018
 Additive Combinatorics Workshop, Linz
- *Families with few chains* 2017
 Random Structures and Algorithms, Gniezno
- *Applications of the Container Method* 2015
 Random Structures and Algorithms, Pittsburgh
- *Cops and robbers on diameter two graphs* 2015
 Connections in Discrete Mathematics, Vancouver

OUTREACH

- Lecture series at Hausdorff Summer School: Formal Math and Computer-Assisted Theorem Proving 2023
- Co-organizer of ICERM Workshop on Categorification and Computation in Algebraic Combinatorics 2023
- Instructor in the summer workshop “AI Retreat” 2023
- Participated in the organization of Random Structures and Algorithms conference in Zürich 2019 and Bennyfest, a one day conference celebrating Benny Sudakov’s 50th birthday. 2019

PROFESSIONAL ACTIVITIES

- Referee for journals: International Mathematics Research Notices; Combinatorica; Combinatorics, Probability and Computing; Random Structures and Algorithms; European Journal of Combinatorics; SIAM Journal on Discrete Mathematics; Electronic Journal of Combinatorics; Advances in Combinatorics.

AWARDS AND ACHIEVEMENTS

- William Cavendish Scholar in Mathematics 2013
- Charles Clemmow / Harry Benton Talbot Prize for Mathematics 2013
- Senior Scholar of Peterhouse 2011

TEACHING EXPERIENCE	• <i>Probabilistic Combinatorics (WPI)</i>	2024
	• <i>Bridge to Higher Mathematics (WPI)</i>	2023, 2024
	• <i>Discrete Mathematics (WPI)</i>	2022, 2024
	• <i>Course Organizer, Graph Theory (ETH Zürich)</i>	2020
	• <i>Teaching Assistant, Algebraic Methods in Combinatorics (ETH Zürich)</i>	2019
	• <i>Teaching Assistant, Graph Theory (ETH Zürich)</i>	2019
	• <i>Teaching Assistant, Lineare Algebra I (ETH Zürich, in German)</i>	2018
	• <i>Grader, Linear Algebra I (UIUC)</i>	2018
	• <i>Supervisor, Part II Graph Theory (University of Cambridge)</i>	2017
	• <i>Teaching Assistant, Calculus I (UIUC)</i> Made the list of teachers ranked as excellent by their students.	2017
	• <i>Grader, Probabilistic Methods in Combinatorics (UIUC)</i>	2016
	• <i>Teaching Assistant, Calculus I (UIUC)</i> Made the list of teachers ranked as excellent by their students.	2015
	• <i>Grader, Combinatorics (UIUC)</i>	2015, 2017
	STUDENTS SUPERVISED	• Ethan Washock (WPI, MSc)
• Wang Zeyu (ETH Zürich, BSc)		2019
LANGUAGE SKILLS	Hungarian: Native	
	German: Native	
	English: Fluent	
	French: Intermediate	
INTERNSHIPS	<i>Genomics Research</i> at Wellcome Trust Sanger Institute, Cambridge, UK	2013
	<i>Software Engineer Internship</i> at Metaswitch Networks, Coventry, UK	2012
	<i>Actuary Internship</i> at Aegon, Budapest, HU	2011
H-index:	10	
ORCID:	https://orcid.org/0000-0002-6423-3730	