

Marcin Waniek | Curriculum Vitae

New York University Abu Dhabi
PO Box 129188, Saadiyat Island, Abu Dhabi, UAE

📞 (+971) 501 280 640 • ✉️ mjwaniek@gmail.com • 🌐 mjwaniek.com

Employment

New York University Abu Dhabi

Post-Doctoral Associate

- Supervisor: Dr Talal Rahwan

Feb 2019–now

Abu Dhabi, UAE

Khalifa University of Science and Technology

Post-Doctoral Fellow

- Supervisor: Dr Aamena Alshamsi

Jul 2017–Feb 2019

Abu Dhabi, UAE

Education

University of Warsaw

Doctor of Philosophy, Computer Science

- **Polish Artificial Intelligence Society Award for the Best Ph.D. Dissertation in Artificial Intelligence in 2017**
- **Dissertation with distinction**
- Warsaw Center of Mathematics and Computer Science scholarship
- Scholarship for best PhD students
- Scholarship from the economic subsidy
- Thesis : *Hiding in Social Networks* (supervisors: Prof. Piotr Faliszewski, Dr Tomasz Michalak)

Sep 2013–Jun 2017

Warsaw, Poland

University of Warsaw

Master of Science, Computer Science

- **Diploma with distinction, *Summa cum laude***
- Rector's scholarship for best students
- Thesis : *Computer simulation of 17th century warfare* (supervisor: Prof. Jerzy Tyszkiewicz)

Sep 2011–Jun 2013

Warsaw, Poland

University of Warsaw

Bachelor of Science, Computer Science

Sep 2008–Jun 2011

Warsaw, Poland

Journal publications

How weaponizing disinformation can bring down a city's power grid

G. Raman, B. AlShebli, M. Waniek, T. Rahwan, J. Peng

in PLOS One (2020)

Computational aspects of optimal strategic network diffusion

M. Waniek, K. Elbassioni, F. L. Pinheiro, C. A. Hidalgo, A. Alshamsi

in Theoretical Computer Science (2020)

Strategic Attack & Defense in Security Diffusion Games

M. Waniek, T. Michalak, A. Alshamsi

in ACM Transactions on Intelligent Systems and Technology (2019)

How to Hide One's Relationships from Link Prediction Algorithms

M. Waniek, K. Zhou, Y. Vorobeychik, E. Moro, T. Michalak, T. Rahwan
in Scientific Reports (2019)

Strategic distribution of seeds to support diffusion in complex networks

J. Jankowski, M. Waniek, A. Alshamsi, P. Bródka, R. Michalski
in PLOS One (2018)

Hiding individuals and communities in a social network

M. Waniek, T. Michalak, M. Wooldridge, T. Rahwan
in Nature Human Behaviour (2018)

Conference publications

The Manipulability of Centrality Measures—An Axiomatic Approach

T. Wąs, M. Waniek, T. Rahwan, T. Michalak
in the 2020 International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2020)

Hiding in Multilayer Networks

M. Waniek, T. Michalak, T. Rahwan
in the Thirty-Fourth AAAI Conference on Artificial Intelligence (AAAI 2020)

Attacking Similarity-Based Link Prediction in Social Networks

K. Zhou, T. Michalak, M. Waniek, T. Rahwan, Y. Vorobeychik
in the 2019 International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2019)

On the Construction of Covert Networks

M. Waniek, T. Michalak, T. Rahwan, M. Wooldridge
in the 2017 International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2017)

The Dollar Auction with Spiteful Players

M. Waniek, L. Tran-Thanh, T. Michalak, N. Jennings
in the Thirty-First AAAI Conference on Artificial Intelligence (AAAI 2017)

Repeated Dollar Auctions: A Multi-Armed Bandit Approach

M. Waniek, L. Tran-Thanh, T. Michalak
in the 2016 International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2016)

Spiteful Bidding in the Dollar Auction

M. Waniek, A. Nieścieruk, T. Michalak, T. Rahwan
in the 2015 International Joint Conference on Artificial Intelligence (IJCAI 2015)

Spiteful Bidding in the Dollar Auction (Extended Abstract)

M. Waniek, A. Nieścieruk, T. Michalak, T. Rahwan
in the 2015 International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2015)

Petro: a Multi-Agent Model of Historical Warfare

M. Waniek
in the 2014 IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT 2014)

An Agent-Based Simulation of the Battle of Kokenhausen (Extended Abstract)

M. Waniek
in the 2014 International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2014)

Research projects led as principal investigator

Hiding in Social Networks

Polish National Science Centre grant UMO-2015/17/N/ST6/03686

2016-2019

University of Warsaw

Principal investigator, performing research on disguising one's importance in social networks.

Research projects participant

- Strategic Network Diffusion** **2017-2018**
Khalifa University of Science and Technology
Postdoctoral researcher, performing research on strategic spread of network influence.
- Tractable Game-Theoretic Network Centrality Measures** **2014-2016**
Polish National Science Centre grant DEC-2013/09/D/ST6/03920 *University of Warsaw*
Performing research on game-theoretic centralities in graphs.
- GRAPE (Group for Research in Applied Economics)** **2014-2015**
Polish National Science Centre grant UMO-2011/01/D/HS4/04039 *University of Warsaw*
Creating multi-agent system for simulating pension system reform and analyzing its effect among heterogenous cohorts, searching for the best reform path.

Invited seminars

- Massachusetts Institute of Technology, Scalable Cooperation Group** **Mar 2018**
Hiding in Social Networks *Cambridge, USA*
- Military University of Technology, Institute of Telecommunications** **Jul 2017**
Hiding in Social Networks *Warsaw, Poland*

Research cooperation

- Tokyo Institute of Technology** **Sep 2019**
Tokyo, Japan
Cooperation with Petter Holme on hiding the source of diffusion and hiding nodes in temporal networks.
- Massachusetts Institute of Technology** **Mar 2018**
Cambridge, USA
Cooperation with Cesar Hidalgo on boosting diffusion in homophilous networks.
- University of Southampton** **Nov 2015, Jun 2016**
Southampton, UK
Cooperation with Long Tran-Thanh on learning in the dollar auction with spiteful players.
- University of Oxford** **Jun 2015**
Oxford, UK
Cooperation with Tomasz Michalak and Michael Wooldridge (head of Computer Science department) on disguising centrality in network. Presentation on the seminar for Game Theory group.
- Masdar Institute of Science and Technology** **Jan 2015, Mar 2017**
Abu Dhabi, UAE
Cooperation with Talal Rahwan and Iyad Rahwan on disguising centrality in networks. Presentation on seminar for Iyad Rahwan's research group.

Conference & workshop presentations

- IC2S2 2020** **Jul 2020**
6th Annual International Conference on Computational Social Science *online*
- AAAI 2020** **Feb 2020**
The 34th AAAI Conference on Artificial Intelligence *New York, USA*

NetSciX 2020 <i>International School and Conference on Network Science</i>	Jan 2020 Tokyo, Japan
IC2S2 2019 <i>5th Annual International Conference on Computational Social Science</i>	Jul 2019 Amsterdam, Netherlands
WTFNS 2019 <i>The Frontiers of Network Science</i>	Apr 2019 Abu Dhabi, UAE
ICCS 2018 <i>International Conference on Complex Systems</i>	Jul 2018 Cambridge, USA
IC2S2 2018 <i>4th Annual International Conference on Computational Social Science</i>	Jul 2018 Evanston, USA
NetSci 2018 <i>International School and Conference on Network Science</i>	Jun 2018 Paris, France
CompleNet 2018 <i>International Conference on Complex Networks</i>	Mar 2018 Boston, USA
FIT 2017 <i>Forum of Theoretical Computer Science</i>	Jul 2017 Warsaw, Poland
AAMAS 2017 <i>International Conference on Autonomous Agents and Multiagent Systems</i>	May 2017 Sao Paulo, Brazil
ADVERSE 2017 <i>Adversarial Reasoning in Multiagent Systems</i>	May 2017 Sao Paulo, Brazil
Network Science in Economics 2017 <i>Third Annual Conference on Network Science and Economics</i>	Apr 2017 Saint Louis, USA
AAAI 2017 <i>The 31st AAAI Conference on Artificial Intelligence</i>	Feb 2017 San Francisco, USA
Hurwicz Workshop 2016 <i>VI Hurwicz Workshop on Mechanism Design Theory</i>	Dec 2016 Warsaw, Poland
GAMES 2016 <i>GAMES 2016: 5th World Congress of the Game Theory Society</i>	Jul 2016 Maastricht, Netherlands
Stony Brook 2016 <i>The 27th International Conference on Game Theory</i>	Jul 2016 Stony Brook, USA
Connected Life 2016 <i>Connected Life 2016: Collective Action and the Internet</i>	Jun 2016 Oxford, UK
AAMAS 2016 <i>International Conference on Autonomous Agents and Multiagent Systems</i>	May 2016 Singapore, Singapore
IJCAI 2015 <i>International Joint Conference on Artificial Intelligence</i>	Jul 2015 Buenos Aires, Argentina
Stony Brook 2015 <i>The 26th International Conference on Game Theory</i>	Jul 2015 Stony Brook, USA
Connected Life 2015 <i>Connected Life 2015: Our Digital Society</i>	Jun 2015 Oxford, UK

AAMAS 2015*International Conference on Autonomous Agents and Multiagent Systems***May 2015***Istanbul, Turkey***IAT 2014***International Conference on Intelligent Agent Technology***Aug 2014***Warsaw, Poland***AAMAS 2014***International Conference on Autonomous Agents and Multiagent Systems***May 2014***Paris, France***ECAGS 2014***Workshop on Economic and Computational Aspects of Game Theory***Mar 2014***Warsaw, Poland*

Reviewing experience

IEEE Transactions on Computational Social Systems: 2020*Reviewer***IEEE Transactions on Big Data:** 2020*Reviewer***ICDT:** 2020*Subreviewer***Workshop on Social Influence, in conjunction with ASONAM:** 2019*Program Committee***NetSciX:** 2019*Program Committee***JAIR:** 2019*Reviewer***COIN:** 2019*Reviewer***PLOS ONE:** 2017*Reviewer***AAMAS:** 2019*Subreviewer***AAAI:** 2015, 2016, 2018*Subreviewer***IJCAI:** 2016*Subreviewer*

Teaching experience

Object-Oriented Programming**2014-2017***Laboratory & classes**University of Warsaw***Advanced Methods of Artificial Intelligence****2014-2017***Laboratory**University of Warsaw***Information Technology****2014***Seminar**University of Warsaw*

Computer skills

Basic: CSS, HTML, JavaScript, PHP**Intermediate:** C#, Haskell, L^AT_EX, MS SQL, Oracle SQL, Prolog, Python**Advanced:** C, C++, Java

Languages

Polish: Mothertongue**English:** Proficient**German, Russian:** Basic

Research interests

- Social network analysis
- Complexity analysis
- All-pay auctions
- Simulations
- Multi-agent system

Personal interests

- Fantasy & Science Fiction literature
- Weightlifting
- History of 17th century Europe