Xintong Wang

Curriculum Vitae

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Employment

02/2021 – present **Postdoctoral Fellow**, *Harvard University*.
School of Engineering and Applied Sciences, hosted by David C. Parkes

08/2015 – 12/2020 **Research Assistant**, *University of Michigan, Ann Arbor*.
Department of Computer Science and Engineering, advised by Michael P. Wellman

05/2019 – 08/2019 **Research Intern**, *J.P. Morgan AI Research, New York City*.
Mentors: Tucker Hybinette Balch, Manuela Veloso

05/2018 – 08/2018 **Research Intern**, *Microsoft Research, New York City*.
Mentors: David M. Pennock, David M. Rothschild, Miroslav Dudík

05/2014 – 08/2014 **Algorithmic Trading Intern**, *IMC Financial Markets, Chicago*.
Mentor: Floris Ouwendijk

Education

2015 – 2021 **Ph.D. in Computer Science and Engineering**, *University of Michigan, Ann Arbor*.
Advisor: Michael P. Wellman

2015 – 2018 **M.Sc. in Computer Science and Engineering**, *University of Michigan, Ann Arbor*.

2011 – 2015 **B.Sc. in Computer Science**, *Washington University in St. Louis*.
Second Majors in Mathematics and Finance | Magna Cum Lauda

Research Interests

AI and Economics, Multi-agent Systems, Computational Game Theory, Market Design

Publications

Refereed Conference & Journal Publications (*: equal contribution)

[r.8] Designing a Combinatorial Financial Options Market
Xintong Wang, David M. Pennock, Nikhil R. Devanur, David M. Rothschild, Biaoshuai Tao, Michael P. Wellman
EC 2021: ACM Conference on Economics and Computation.

[r.7] Log-time Prediction Markets for Interval Securities
Miroslav Dudík*, **Xintong Wang***, David M. Pennock, David M. Rothschild
AAMAS 2021: International Conference on Autonomous Agents and Multiagent Systems.

[r.6] Spoofing the Limit Order Book: A Strategic Agent-Based Analysis
Xintong Wang, Christopher Hoang, Yevgeniy Vorobeychik, Michael P. Wellman
Games 2021, 12(2), 46.

[r.5] Market Manipulation: An Adversarial Learning Framework for Detection and Evasion
Xintong Wang, Michael P. Wellman
IJCAI 2020: International Joint Conference on Artificial Intelligence.

[r.4] Generating Realistic Stock Market Order Streams
Junyi Li, **Xintong Wang**, Yaoyang Lin, Arunesh Sinha, Michael P. Wellman
AAAI 2020: International Conference on Artificial Intelligence.

[r.3] Learning-based Trading Strategies in the Face of Market Manipulation
Xintong Wang, Christopher Hoang, Michael P. Wellman
ICAIF 2020: ACM International Conference on AI in Finance.

[r.2] A Cloaking Mechanism to Mitigate Market Manipulation
Xintong Wang, Yevgeniy Vorobeychik, Michael P. Wellman
IJCAI 2018: International Joint Conference on Artificial Intelligence.

[r.1] Spoofing the Limit Order Book: An Agent-based Model
Xintong Wang, Michael P. Wellman
AAMAS 2017: International Conference on Autonomous Agents and Multiagent Systems.

Workshop & Consortium Papers

[w.2] Studies on the Computational Modeling and Design of Financial Markets
Xintong Wang
AAMAS 2019 Doctoral Consortium.

[w.1] Market Making with Liquidity Adaptation via Learning Rate Tuning
Xintong Wang
EC 2017 Workshop on Forecasting.

Honors & Awards

2020 **Finalist of CSE Graduate Student Honors Competition**, *University of Michigan, Ann Arbor*.
2019 **Rising Stars in EECS Workshop**.
2017 **D. E. Shaw Exploration Fellowship**.
2015 **Distinction in Mathematics**, *Washington University in St. Louis*.
2014 **Washington University Scholarship**, *Washington University in St. Louis*.

Teaching & Mentoring Experiences

Teaching

University of Michigan, Ann Arbor
Graduate Student Instructor, EECS 203 Discrete Mathematics | Fall 2016

Washington University in St. Louis
Teaching Assistant, MEC 290 Microeconomics | Springs 2013, 2014, 2015
Teaching Assistant, MGT 100 Individual in a Managerial Environment | Falls 2012, 2013, 2014

Research Mentoring

University of Michigan, Ann Arbor
Christopher Hoang, B.Sc. in Computer Science | 2018 – 2020

Topic: Designing learning-based trading agents. Related publications: r.3, r.6.

Shashank Kedia, M.Sc. in Computer Science | Spring 2019

Topic: Generative models for agent-based activity traces.

Junyi Li, M.Sc. in Computer Science | 2018 – 2019

Topic: Generative models for time series data (order streams). Related publications: r.4.

Yaoyang Lin, B.Sc. in Computer Science | 2018 – 2019

Topic: Simulation validation and generating time series data. Related publications: r.4.

Noah Fidel, B.Sc. in Data Science Engineering | 2017 – 2018

Topic: Simulation validation and learning from limit order book data.

Zheng Chen, B.Sc. in Computer Science | 2017 – 2018

Topic: Anomaly detection on time-series data.

Services

Program Committee Member: ICAIF 2020, 2021, AI4SG 2021.
Reviewer: AAAI, AAMAS, AIES, EC, IJCAI, WINE, IEEE Intelligent Systems.
Session Chair: INFORMS 2021 Session on Financial Market Design.
AI Seminar Tsar, University of Michigan, 2018 – 2019.
Student Mentor, The Ensemble of CSE Ladies, University of Michigan, 2016 – 2020.