## James Siderius

CONTACT Information Laboratory for Information and Decision Systems

Massachusetts Institute of Technology

32 Vassar St - 32 D640

Cambridge, MA 02139

EDUCATION

# Massachusetts Institute of Technology, Cambridge, MA

Laboratory for Information and Decision Systems

Ph.D., Electrical Engineering and Computer Science (2022)

- <u>Dissertation</u>: Understanding Social Media: Misinformation, Attention, and Digital Advertising

Voice: (503) 757-7954

e-mail: siderius@mit.edu

web: https://siderius.lids.mit.edu

- Advisors: Daron Acemoglu (Economics) and Asuman Ozdaglar (EECS)

S.M., Electrical Engineering and Computer Science (2018) GPA: 5.00/5.00; Minor: Econometrics and Data Science

# Princeton University, Princeton, NJ

A.B., Mathematics (2016)

Summa Cum Laude and Phi Beta Kappa

Overall GPA: 3.95/4.00; Departmental GPA: 4.00/4.00 Minor certificates in Finance, Applications of Computing

#### EMPLOYMENT

### Massachusetts Institute of Technology, Cambridge, MA

Department of Electrical Engineering and Computer Science

Postdoctoral Associate (September 2022 - May 2023)

### Jade Necklace LLC, Berkeley, CA

Analytics Startup

Consultant (May 2022 - current)

# Microsoft Research New England, Cambridge, MA

Economics & Computation Group

Research Intern (May 2022 - August 2022)

# Board of Governors of the Federal Reserve System, Washington, DC

Systemic Financial Institutions and Markets

Dissertation Fellow (June 2019 - September 2019)

#### Citadel LLC, Chicago, IL

Global Quantitative Strategies

Quantitative Analyst (June 2016 - August 2017)

# Morgan Stanley, New York, NY

Equity & Sales

Quantitative Trading Intern (June 2015 - August 2015)

#### Weiss Asset Management, Boston, MA

Global Investments Fund

Trading Intern (June 2014 - August 2014)

#### Papers

Click on title to obtain latest version.

[1] A Model of Online Misinformation (with D. Acemoglu and A. Ozdaglar). NBER Working Paper No. 28884 (2022). Submitted for publication.

- [2] When is Society Susceptible to Manipulation? (with M. Mostagir and A. Ozdaglar). Management Science (2022).
- [3] Social Inequality and the Spread of Misinformation (with M. Mostagir). Management Science (2022). Diversity, Equity, and Inclusion (DEI) Paper Award (2021) from Ross School of Business.
- [4] Learning in a Post-Truth World (with M. Mostagir). Management Science 68(4), 2860-2868 (2022) [Fast track].
- [5] Strategic Reviews (with M. Mostagir). Management Science (2022).
- [6] Systemic Credit Freezes in Financial Lending Networks (with D. Acemoglu, A. Ozdaglar, and A. Tahbaz-Salehi). Mathematics and Financial Economics 15(1), 185-232 (2021).
- [7] When do Misinformation Policies (not) Work? (with M. Mostagir). Working paper (2022).
- [8] Targeting Centrality: A Unifying Framework for Influence in Networks (with M. Mostagir). Working paper (2022).

# Ongoing Work

Please email to request a copy of the most recent version.

- [9] The Welfare Implications of Online Media Business Models (with D. Acemoglu, D. Huttenlocher, and A. Ozdaglar).
- [10] Competing for Limited Attention on Social Media (with D. Acemoglu and A. Ozdaglar).
- [11] When Should Platforms Break Echo Chambers? (with M. Mostagir).
- [12] An Experiment on Algorithmic Ranking: User Behavior, Platform Incentives, and Policy (with D. Huttenlocher, C. Lyu, and A. Ozdaglar).
- [13] Fighting Fire with Fire: An Experiment on Misinformation Sharing Incentives (with D. Acemoglu, A. Berinsky, C. Lyu, A. Madry, A. Ozdaglar, and D. Rand).
- [14] Misinformation Online to Offline: A Twitter Field Study (with D. Acemoglu, A. Berinsky, C. Lyu, and A. Ozdaglar).
- [15] Engagement-Maximizing Social Media Algorithms: How Platforms Shape What You Think (with S. Cen and A. Ozdaglar).

### TEACHING EXPERIENCE

Massachusetts Institute of Technology, Cambridge, MA

6.255/15.903 Optimization Methods (Fall 2019)

Teaching Assistant to Pablo Parrilo; over 175 students.

Evaluation: 6.0/6.4/6.3 // 7.0 (Interest / Knowledgeable / Helped learning // Total Possible)

6.883 Data-Driven Decision Making and Society (Spring 2021)

**Lecturing Assistant.** Assisted Professor Asuman Ozdaglar in designing lecture topics revolving around models and empirical studies of social media and misinformation.

Princeton University, Princeton, NJ

COS 126/217/226 Core Undergraduate Computer Science Curriculum (Fall 2013 - Spring 2016) Laboratory Teaching Assistant AWARDS AND POSITIONS

President of the MIT IDSS (Institute for Data, Systems, and Society) Student Council (2020-2022)

Member of the MIT Graduate Student Council (GSC) (2020-2022)

Recipient of MIT Jacobs Presidential Fellowship (2016-2017)

Princeton Federal Reserve Challenge Team (2013-2016)

Recipient of Princeton's Shapiro Prize for Academic Excellence (2014-2015)

Recipient of Siemens Award/Scholarship for STEM Advanced Placement (2011-2012)

Reviewer

Management Science; Operations Research; Journal of Economic Theory; Journal of Economic Dynamics and Control; ACM Conference on Economics and Computation; IEEE Transactions on Control of Network Games; Proceedings of Machine Learning Research; International Conference on Algorithmic Learning Theory; Journal of Naval Research Logistics.

SELECTED TALKS

November 2022: INFORMS Annual Meeting, Indianapolis, IN. When Should Platforms Break Echo Chambers? (with M. Mostagir).

July 2022: Society for the Advancement of Economic Theory (SAET) Annual Conference, Canberra, Australia. A Model of Online Misinformation (with D. Acemoglu and A. Ozdaglar).

May 2022: Marketplace Innovation Workshop. When Should Platforms Break Echo Chambers? (with M. Mostagir).

May 2022: Janeway Institute Networks Seminar: University of Cambridge Economics. A Model of Online Misinformation (with D. Acemoglu and A. Ozdaglar).

March 2022: Network Science and Economics Conference, Chicago, IL. A Model of Online Misinformation (with D. Acemoglu and A. Ozdaglar); When do Misinformation Policies (not) Work? (with M. Mostagir).

October 2021: INFORMS Annual Meeting, Anaheim, CA. A Model of Online Misinformation (with D. Acemoglu and A. Ozdaglar).

July 2021: MIT Human Cooperation Lab. Learning in a Post-Truth World (with M. Mostagir).

March 2021: Network Science and Economics Conference. Social Inequality and the Spread of Misinformation (with M. Mostagir).

October 2019: INFORMS Annual Meeting, Seattle, WA. Systemic Credit Freezes in Financial Lending Networks (with D. Acemoglu, A. Ozdaglar, and A. Tahbaz-Salehi); Strategic Reviews (with M. Mostagir); Collaborative Contests (with M. Mostagir).

October 2019: CIRANO-Sam M. Walton College of Business Workshop on Networks in Trade and Finance, Montreal, QC. Systemic Credit Freezes in Financial Lending Networks (with D. Acemoglu, A. Ozdaglar, and A. Tahbaz-Salehi).

June 2019: Board of Governors of the Federal Reserve System, Washington, DC. Systemic Credit Freezes in Financial Lending Networks (with D. Acemoglu, A. Ozdaglar, and A. Tahbaz-Salehi).

May 2019: Marketplace Innovation Workshop, Stanford, CA. Systemic Credit Freezes in Financial Lending Networks (with D. Acemoglu, A. Ozdaglar, and A. Tahbaz-Salehi).