Şirag Erkol

| CONTACT INFORMATION | Northwestern University
Center for Science of Science and Innovation
600 Foster St, Evanston, IL 60208 | (812) 558-8938
siragerkol@gmail.com
siragerkol.github.io |

ACADEMIC POSITIONS

Northwestern University, Evanston, IL

Postdoctoral Researcher   **July 2023 – present**

Indiana University, Bloomington, IN

Research & Teaching Assistant   **August 2017 – May 2023**

- Assisted courses:
  INFO-I 369 - Performance Analytics (Spring 2020, Spring 2021)

Boğaziçi University, Istanbul, Turkey

Research & Teaching Assistant   **October 2014 – August 2017**

- Assisted courses:
  IE 312 - Facilities Design and Planning (Fall 2014, Fall 2015, Fall 2016)
  IE 350 - Systems Science and Engineering (Spring 2015, Spring 2016)
  IE 484 - Simulation Gaming and Decision Experimentation (Fall 2016)
  IE 48F - Agent-Based Modeling and Simulation (Spring 2015, Spring 2016, Spring 2017)
  IE 550 - Dynamics of Socio-Economic Systems (Fall 2015)

- Assistant at Socio-Economic System Dynamics (SESDYN) Laboratory

EDUCATION

Indiana University, Bloomington, IN   **August 2017 – May 2023**

Ph.D. in Informatics, Complex Networks and Systems track

- Advisor: *Assoc. Prof. Filippo Radicchi*
- Thesis: *Identifying Influential Spreaders in Complex Networks*
- Minor: Computer Science

M.S. in Informatics

Boğaziçi University, Istanbul, Turkey

M.S. in Industrial Engineering   **September 2014 – August 2016**
- Advisor: *Assoc. Prof. Gönenç Yücel*
- Thesis: *Influence Maximization Based on Partial Network Structure Information: A Comparative Analysis on Seed Selection Heuristics*

B.S. in Industrial Engineering   **September 2010 – June 2014**
- Graduation Project: *Analyzing Parking Stand Requirements for Istanbul Ataturk Airport*

WORK EXPERIENCE

Pacific Northwest National Laboratory, Richland, WA   **June 2021 – August 2021**

Ph.D. Intern

HONORS & AWARDS

IU Luddy Summer Research Award ($4400)   **2022**

PUBLICATIONS

Published:

Consistency pays off in science
Ş. Erkol, S. Sikdar, F. Radicchi, and S. Fortunato, *Quantitative Science Studies*, 4, 491 (2023)
[DOI] [arXiv] [GitHub] [Website]

Effective submodularity of influence maximization on temporal networks
Ş. Erkol, D. Mazzilli and F. Radicchi, *Physical Review E*, 106, 034301 (2022)
[DOI] [arXiv]

Who is the best coach of all time? A network-based assessment of the career performance of professional sports coaches
Ş. Erkol and F. Radicchi, *Journal of Complex Networks*, 9, cnab012 (2021)
[DOI] [arXiv] [Website]

Influence maximization on temporal networks
Ş. Erkol, D. Mazzilli and F. Radicchi, *Physical Review E*, 102, 042307 (2020)
[DOI] [arXiv]

Systematic comparison between methods for the detection of influential spreaders in complex networks
Ş. Erkol, C. Castellano and F. Radicchi, *Scientific Reports*, 9, 15095 (2019)
[DOI] [arXiv]

Influence maximization in noisy networks
Ş. Erkol, A. Faqeeh and F. Radicchi, *EPL*, 123, 58007 (2018)
[DOI] [arXiv]

Influence Maximization Based on Partial Network Structure Information: A Comparative Analysis on Seed Selection Heuristics
Ş. Erkol and G. Yücel, *International Journal of Modern Physics C*, 28, 1750122 (2017)
[DOI]

Under Review:

Symmetry breaking in optimal transport networks
S. Patwardhan, M. Barthelemy, **Ş. Erkol**, S. Fortunato, F. Radicchi
[arXiv]

PRESENTATIONS	**Talks:**	
	Effective submodularity of influence maximization on temporal networks, NetSci 2022, Online	**July 2022**
	Influence maximization on temporal networks, Networks2021, Online	**July 2021**
	Influence maximization on temporal networks, University of Limerick, Ireland, Online	**March 2021**
	Posters:	
	Consistency pays off in science, ICSSI 2023, Evanston, IL, USA	**June 2023**
	Systematic comparison between methods for the detection of influential spreaders in complex networks, NetSci 2020, Online	**September 2020**
	Influence maximization in noisy networks, NetSci 2019, Burlington, VT, USA	**May 2019**

COMMUNITY
SERVICE
Journal Reviewer: Applied Mathematics and Computation; Chaos, Solitons & Fractals; Expert Systems with Applications; IEEE Transactions on Network Science and Engineering; Journal of Computational Science; Pattern Recognition

Conference Reviewer: ISSI 2023

Journal Subreviewer: PLoS One

COMPUTER SKILLS	Frequent user of Python, LaTeX Experierce in Django, NetLogo, HTML, CSS Familiar with MySQL, C, R, Git, Stella
LANGUAGES	English (fluent), Turkish (native), Armenian (native), French (beginner), Spanish (beginner)

Last updated: November 10, 2023