

ESZTER BOKÁNYI

CONTACT INFORMATION

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EDUCATION

2015 – 2019 PhD in PHYSICS, *Statistical Physics, Biological Physics and the Physics of Quantum Systems*
Eötvös Loránd University, Budapest, Hungary

2012 – 2015 Master in PHYSICS, *statistical physics specialization*
Eötvös Loránd University, Budapest

2014 Master in PHYSICS, one semester program, *Campus Hungary Scholarship*
Humboldt Universität, Berlin

2009 – 2012 Bachelor in PHYSICS
Eötvös Loránd University, Budapest

2009 – 2015 MATHEMATICS AND PHYSICS Workshop, *member*
Eötvös József Collegium, Budapest

TEACHING AND WORK EXPERIENCE

2020 – research fellow
CIAS NeTI Lab, Corvinus University, Budapest

2019 – 2020 junior research fellow
HAS CERS ANET Lendület Group, Budapest

2017 – Mentor, Module Leader (Network Science)
Milestone Institute, Budapest, Hungary

2016 – 2018 Teaching Assistant
Eötvös Loránd University, Budapest, Hungary

2015 – 2018 Data Analyst Intern (Smart Cities, Public Transport Optimization)
Ericsson R&D Traffic Lab, Budapest, Hungary

2014 – 2015 College Preparatory Teacher (Mathematics and Physics)
Balassi Institute, Budapest, Hungary

SKILLS

statistical physics, network science, complex systems simulations, machine (but not deep) learning, statistics, data engineering, data analytics and visualization, agent based modeling

programming in Python, R, JavaScript, basic C/C++; advanced Unix shell and git usage; interactive Dash visualizations; SQL query and database building, database management; natural language processing; handling maps and GIS data; web scraping; basic Spark; \LaTeX ; HTML and CSS; moderate experience in system administration

PRESENTATIONS

<i>Conference talks</i>	NetSci, Rome (online)	2020
	MECO, Kolozsvár (online)	2020
	HSE Annual Conference, Budapest	2019
	CERS Conference, Sopron	2019
	CERS (KTI) Seminar Series, Budapest	2019
	Conference on the Geography of Innovation and Complexity, Utrecht	2019
	International Conference on Computational Social Science, Amsterdam	2019
	EuroCCS, Bias and Discrimination Workshop, Cologne	2018
	Conference on Complex Systems, Thessaloniki	2018
	HAS ANET Group, seminar	2018
	International Conference on Computational Social Science, Cologne	2017
	HAS RECENS Group, seminar, Budapest	2016
	Ericsson University Day	2016
	Networks, Complexity and Economic Development Workshop, Budapest	2017
	HAS Statistical Physics Day	2015-2019
	<i>Popular science</i>	Enriching the urban space with digital footprints, Meetup, Budapest
Enriching the urban space with digital footprints, CityScope Workshop, Budapest		2019
Women in Data Science, Budapest		2019
How to research cities as a physicist?, ELTE Atomcsill		2018
How to research cities as a physicist? TV-programme , M5		2017
Early Bird Catches the Worm, Eötvös József Collegium		2016

LANGUAGES

GERMAN	C2 level	– Goethe Certificate
ENGLISH	C1 level, also academic usage	– ECL Certificate
FRENCH	C1 level	– DALF Certificate
HUNGARIAN	native speaker	

HOBBIES

choir member, organ playing, piano playing, hiking, board games, analogue photography

LIST OF PUBLICATIONS

- Lengyel B. & Bokányi, E., Di Clemente R., Kertész, J., González, M. C. (2020). The role of geography in the complex diffusion of innovations. *Scientific Reports* 10, 15065.
- Bokányi, E. & Hannák, A. (2020). Ride-share matching algorithms generate income inequality. *Scientific Reports* 10, 6500.
- Bokányi, E., Kondor, D. & Vattay, G. (2019). Scaling in words on Twitter. *Royal Society Open Science*, 6(10), 190027.
- Bokányi, E., Kallus, Zs. & Gódor, I. (2019). Collective sensing of evolving urban structures: From activity-based to content-aware social monitoring. *EPB: Urban Analytics and City Science*, p. 239980831984876
- Bokányi, E., Szállási, Z., & Vattay, G. (2018). Universal scaling laws in metro area election results. *PLOS ONE*, 13(2), e0192913.
- Sóti, A., Bokányi, E. & Vattay, G. (2018). Urban scaling of football followership on Twitter. *Acta Polytechnica Hungarica* 15, 239–250
- Kallus, Z., Kondor, D., Stéger, J., Csabai, I., Bokányi, E., & Vattay, G. (2017). Video Pandemics: Worldwide Viral Spreading of Psy’s Gangnam Style Video. In D. Trajanov & V. Bakeva (Eds.), *ICT Innovations 2017: Data-Driven Innovation. 9th International Conference, ICT Innovations 2017, Skopje, Macedonia, September 18-23, 2017, Proceedings* (pp. 3–12). Cham: Springer International Publishing.
- Bokányi, E., Lábszki, Z., & Vattay, G. (2017). Prediction of employment and unemployment rates from Twitter daily rhythms in the US. *EPJ Data Science*, 6(1), 14.
- Radnóczy, G., Bokányi, E., Erdélyi, Z., & Misják, F. (2017). Size dependent spinodal decomposition in Cu-Ag nanoparticles. *Acta Materialia*, 123, 82–89.
- Kmetty, Z., Koltai, J., Bokányi, E., & Bozsonyi, K. (2017). Seasonality Pattern of Suicides in the US – a Comparative Analysis of a Twitter Based Bad-mood Index and Committed Suicides. *Intersections*, 3(1).
- Bokányi, E., Kondor, D., Dobos, L., Sebők, T., Stéger, J., Csabai, I. & Vattay, G. (2016). Race, religion and the city: Twitter word frequency patterns reveal dominant demographic dimensions in the United States. *Palgrave Communications*. 2:16010