

KYURI PARK

Amsterdam, the Netherlands

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<https://kyurip.github.io/>

EDUCATION

PhD candidate at Computational Science Lab, University of Amsterdam	Aug 2023 – Present
<ul style="list-style-type: none">Visiting Scholar, Stanford University, Stanford, CA	Spring 2026
<ul style="list-style-type: none">Hosted by Dr. Sara Constantino, Stanford Doerr School of Sustainability	
<ul style="list-style-type: none">Complex Systems Summer School, Santa Fe Institute, Santa Fe, NM, USA	Summer 2026
M.Sc., Methodology and Statistics, Utrecht University; <i>cum laude</i> (GPA: 9.04/10.00)	Jun 2023
<ul style="list-style-type: none">Supervisors: Dr. Oisín Ryan, Dr. Lourens Waldorp	
B.Sc., Psychology, University of Amsterdam; <i>cum laude</i> (GPA: 9.05/10.00)	Jun 2021
<ul style="list-style-type: none">Supervisors: Dr. Claudia van Borkulo, Prof. dr. Denny Borsboom	
B.Sc., Business Management, University of Houston; <i>summa cum laude</i> (GPA: 3.94/4.00)	May 2017
<ul style="list-style-type: none">Exchange student, Mount Royal University, Calgary, AB, Canada	Fall 2014

RESEARCH INTERESTS

Complex systems | Causal inference | Network analysis | Multi-scale dynamics | Feedback loops and stability

PUBLICATIONS

- Park, K.***, Waldorp, L. J., & Ryan, O. (2024). Discovering cyclic causal models in psychological research. *advances.in/psychology*, 2.
- Park, K.***, Li, X., Waldorp, L. J., Lees, M., & Vasconcelos, V. V. (2025). Feedback loops are central to the dynamics of mental disorder symptoms. *Scientific Reports*. <https://doi.org/10.1038/s41598-026-38747-6>
- Elsenburg, L. K., Stronks, K., Galenkamp, H., Lakerveld J., Lok, A., **Park, K.**, Vasconcelos, V. V., Nicolaou, M. (2026). Precariousness and depressed mood: a network analysis in the multi-ethnic HELIUS study, *Social Psychiatry and Psychiatric Epidemiology*, 1-12.
- Park, K.***, Waldorp, L. J., & Vasconcelos, V. V. (2026). The individual- and population-level mechanistic implications of statistical networks of symptoms. DOI:10.31234/osf.io/ysqtr, *under review*.
- Park, K.***, Lees, M., & Vasconcelos, V. V. (2026). A Tutorial on Causal Network Simulation and Exploration Using the causalnet R Package. DOI:10.5281/zenodo.17227051, *accepted; Behavior Research Methods*.
- Park, K.***, Elsenburg, L., Stronks, K., Nicolaou, M., & Vasconcelos, V. V. (2026). From causal discovery to intervention simulation: Modeling precariousness and depression in the HELIUS study. DOI:10.31219/osf.io/396hc_v2, *accepted; SSM-Mental Health*.
- Lee, S. Y., Hwang, H., Kim, T., Kim, Y., **Park, K.**, Yoo, J., Borsboom, D., & Shin, K. (2026). Emergence of psychopathological computations in large language models. *arXiv preprint arXiv:2504.08016*, *under review*.

AWARDS AND GRANTS

• KNAW (Royal Netherlands Academy of Arts & Sciences), Van der Gaag Grant	Feb 2026 – Feb 2027
• Bridge grant, Complex Systems Society (CSS)	Nov 2025 – Nov 2026
• Travel Award, International Meeting of the Psychometric Society (IMPS)	Jul 2025, Jul 2026
• Energy transition through the Lens of SDGs (ENLENS) research grant 2025	Apr 2025 – Apr 2027
• Utrecht Excellence Scholarships (UES), Utrecht University	Sep 2021 – Aug 2023
• Membership of National Society of Collegiate Scholars (NSCS)	May 2017 – Sep 2020
• Scholarship Excellence Award (top honors), University of Houston	May 2017

SELECTED PRESENTATIONS

- Park, K. (May 2026), Complex Systems Approaches to Mental Health and Climate Change Attitudes, *Biohealth Convergence and Open Sharing System (COSS)*, South Korea.
- Park, K. (Feb 2026), Slow-Fast Coupling: Curie-Weiss Symptoms Under Context Dynamics, *3rd Joint CCSS Kobe University-UvA workshop on Computational Social Science and Intelligent Systems*, Amsterdam.
- Park, K. (Jan 2026), *Structural risk shifts symptom thresholds without rewiring depression networks: A slow-fast perspective. Theory Methods Lab Seminar*, Amsterdam.
- Park, K. (Jul 2025), Computational modeling of symptom dynamics and their implications for statistical networks, *ICCS (International Conference on Computational Science)*, Singapore.
- Park, K. (Jul 2025), Unraveling Symptom Dynamics: A Mechanistic Approach to Feedback Loops and Causal Discovery, *IMPS (International Meeting of the Psychometric Society)*, Minneapolis, MN.
- Park, K. (Mar 2025), Computational Approaches to Mental Health at the Symptom Level, *2nd Joint CCSS Kobe University-UvA workshop on Computational Social Science and Intelligent Systems*, Amsterdam.

RESEARCH EXPERIENCE

Utrecht University, Utrecht, the Netherlands — *Jun 2021 – Aug 2023*

- Enhanced R package *mHMMbayes* and developed tutorial materials (Dr. Emmeke Aarts).
- Improved evaluation methods for imputation models using synthetic datasets (Dr. Gerko Vink).
- MSc thesis: Applied and compared cyclic causal discovery algorithms (CCD, FCI, CCI) for psychological data (Dr. Oisín Ryan, Dr. Lourens Waldorp).
- Analyzed psychological network studies to map research question–model alignment (Dr. Noémi Schuurman).
- Human Data Science Group: Co-developed *synthpop.extract* (CBS collaboration), wrote SoDa tutorial, and adapted Bayesian network code (Dr. Erik-Jan van Kesteren, Dr. Mahdi Shafiee Kamalabad).

University of Amsterdam, Amsterdam, the Netherlands — *Nov 2019 – Jan 2021*

- Conducted a meta-analysis on science skepticism predictors (Dr. Bastiaan Rutjens).
- Integrated multi-timescale variables in depression symptom networks using Ising and Mixed Graphical Models (Dr. Claudia van Borkulo, Prof. dr. Denny Borsboom).

TEACHING EXPERIENCE

University of Amsterdam, Amsterdam, the Netherlands

- *Complexity: Can it be Simplified* (BSc honors/MSc), Dr. Vítor V. Vasconcelos — 2023–2025
- *Causality* (MSc Artificial Intelligence), Dr. Sara Magliacane — 2024–2025
- *AI and Psychology* (BSc Psychology), Prof. Han van der Maas — 2021
- *A Peaceful Mind: Mindfulness and Compassion-based Interventions*, Dr. Maja Wrzesien — 2019

Utrecht University, Utrecht, the Netherlands

Student Assistant, Human Data Science Group led by Prof. dr. Daniel Oberski — 2021–2023

- Developed practical materials for courses on Python programming, Bayesian networks, relational event models (REM), missing data, imputation, and text mining
- Provided R programming support to graduate students.

University of Pennsylvania, Philadelphia, PA, USA

- *Teaching Assistant, Social Economics: An Economic Perspective on Human Behavior*, Prof. dr. Femida Handy — Summer 2016

STUDENT ADVISING

- **Henry Zwart** — MSc Student (2026)
Interventions on Asymmetric Belief Networks
- **Paraskevas Leivadaros** — MSc Student (2025)
Elections and Climate Attitudes: How do people's views on climate change and related policies evolve during elections?
- **Gabriela Torres** — MSc Student (2025)
The Impact of COVID-19 Interventions and Extreme Weather Events on Support for Climate Policy.
- **Xinhai Li** — MSc Student (2024)
Unraveling the Role of Feedback Loops in the Dynamics of Major Depressive Disorder.

PROFESSIONAL EXPERIENCE

- *Cabin Crew*, Emirates Airline, Dubai, UAE May 2017 – Mar 2018
- *Accounting Assistant*, Amerril Energy LLC, Houston, TX, USA Jun 2016 – Feb 2017

VOLUNTEERING EXPERIENCE

- Stray Dogs Center (SDC), Dubai, UAE Nov 2017 – Jan 2018
- World Vision United States, WA, USA 2011 – Current
Translator / Sponsor (only sponsoring currently)
 - Started sponsoring a Malawian child in 2011 via World Vision; Translated the letters (Korean – English) sent by sponsors.

SKILLS

Statistical Software: SPSS, JASP, Microsoft Excel, Mplus, JAGS

Programming languages: R, Python, MATLAB, JavaScript (learning), C++ (learning)

Languages: English (Fluent), Korean (Fluent), Dutch (B1)