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

M.Sc, Methodology and Statistics, Utrecht University; *cum laude* (GPA: 9.04/10.00) — Jun 2023
- Supervisors: Dr. Oisín Ryan, Dr. Lourens Waldorp

B.Sc, Psychology, University of Amsterdam; *cum laude* (GPA: 9.05/10.00) — Jun 2021
- Supervisors: Dr. Claudia van Borkulo, Prof. dr. Denny Borsboom

B.Sc, Business Management, University of Houston; *summa cum laude* (GPA: 3.94/4.00) — May 2017

RESEARCH INTERESTS

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

AWARDS AND HONORS

- KNAW (Royal Netherlands Academy of Arts & Sciences), Van der Gaag Grant (€10,000; PI) — Feb 2026 – Feb 2027
- Bridge grant, Complex Systems Society (CSS) — Nov 2025 – Nov 2026
- Travel Award for IMPS 2025 — Jul 2025
- 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
- Dean's list, University of Houston — Fall 2015, Spring & Fall 2016

PUBLICATIONS

- **Park, K.***, Waldorp, L. J., & Ryan, O. (2024). Discovering cyclic causal models in psychological research. *advances.in/psychology,* 2.
- **Park, K.***, Waldorp, L. J., & Vasconcelos, V. V. (2025). The individual- and population-level mechanistic implications of statistical networks of symptom. DOI:10.31234/osf.io/ysqtr, *accepted*.
- **Park, K.***, Lees, M., & Vasconcelos, V. V. (2025). A Tutorial on Causal Network Simulation and Exploration Using the causalnet R Package. DOI:10.5281/zenodo.17227051*, accepted*.
- **Park, K.***, Li, X., Waldorp, L. J., Lees, M., & Vasconcelos, V. V. (2025). The role of feedback loops in dynamical symptom network. DOI:10.31234/osf.io/ed9yv_v1*, accepted*.
- **Park, K.***, Elsenburg, L., Stronks, K., Nicolaou, M., & Vasconcelos, V. V. (2025). From causal discovery to intervention simulation: Modeling precariousness and depression in the HELIUS study. DOI:10.31219/osf.io/396hc_v2, *under review*.
- Lee, S. Y., Hwang, H., Kim, T., Kim, Y., **Park, K.**, Yoo, J., Borsboom, D., & Shin, K. (2025). Emergence of psychopathological computations in large language models. *arXiv preprint arXiv:2504.08016*, *under review*.

CONFERENCE PRESENTATIONS

- Park, K. 2025, Computational modeling of symptom dynamics and their implications for statistical networks *ICCS (International Conference on Computational Science), Singapore.*

- Park, K. 2025, Unraveling Symptom Dynamics: A Mechanistic Approach to Feedback Loops and Causal Discovery, *IMPS (International Meeting of the Psychometric Society), Minneapolis, MN*.

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

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 language: R, Python, MATLAB, JavaScript (learning), C++ (learning)
Languages: English (Proficient), Korean (Native), Dutch (B1)