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Academic positions

2018 - present   *Assistant professor (tenure track)*, Department of Statistics & Data Science, CMU
Courtesy appointment at the Heinz College of Information Systems and Public Policy, CMU
Jan - Jun 2018   *Instructor*, Department of Statistics & Data Science, CMU

Education

2012 - 2017   **PHD** Sociology (*cum laude*), University of Groningen
Committee: Tom Snijders (promotor), Marijtje van Duijn
Thesis: Modeling the dynamics of networks and continuous behavior
Defense date: May 28, 2018

2010- 2012   **RESEARCH MASTER** Behavioral and Social Sciences (*summa cum laude*), specialization Psychometrics and Statistics, University of Groningen
Thesis: Co-evolution of social networks and continuous actor attributes
2008 - 2011   **MASTER** Applied Mathematics (*cum laude*), University of Groningen
Thesis: Consensus in networked multi-agent systems

2006 - 2010   **BACHELOR** Pedagogy and Educational Sciences, University of Groningen
Thesis: Validity assessment of language screening instrument SNEL
2005 - 2008   **BACHELOR** Mathematics (*cum laude*), University of Groningen
Thesis: Abelian sandpiles

Jun 2019   **SUMMER INSTITUTE** in Computational Social Science, Princeton University (two weeks)
Jul - Aug 2012   **SUMMER SCHOOL** in Computational Biology and Bioinformatics, University of Oxford (six weeks)
Project: Mixtures of forests models to detect coevolution in protein sequences

Publications

UNDER REVIEW / R&R

2022+   Li, S., D. Krackhardt and **N.M.D. Niezink**. Do our friends stress us out: A field study of the spread of stress through a community of ties [R&R, Journal of Personality and Social Psychology]
2022+   Li, S., D. Krackhardt and **N.M.D. Niezink**. The importance of project status for career success: A network perspective [submitted]
2022+   Zajdel, M., J.B. Naqvi, **N.M.D. Niezink**, and V.S. Helgeson. The role of patient and spouse daily appraisal and collaboration in type 2 diabetes [R&R, Journal of Social and Personal Relationships]

REFEREED PUBLICATIONS

2022   Wu, W., **N.M.D. Niezink**, and B.W. Junker (2022). Diagnostics for pairwise comparison models. Journal of the Royal Statistical Society - Series A.
2022   **Niezink, N.M.D.** and P. Campana (2022). When things turn sour: A network event study of organized crime violence. Journal of Quantitative Criminology.

2021	Yang, X., **N.M.D. Niezink** and R. Nugent. (2021). Learning social networks from text data using covariate information. Statistical Methods & Applications, 30(5), 1399–1423.
2021	Pan, J., Y. Zhong, S. Young, and **N.M.D. Niezink** (2021). Collaboration on evidence synthesis in Africa: a network study of growing research capacity. Health Research Policy and Systems, 19, 126.
2019	**Niezink, N.M.D.**, M.A.J. van Duijn and T.A.B. Snijders (2019). No longer discrete: Modeling the dynamics of social networks and continuous actor attributes. Sociological Methodology, 49(1).
2019	**Niezink, N.M.D.** (2019). Offline consequences of echo chambers. In Fourth International Workshop on Social Sensing (SocialSense'19), April 15, 2019, Montreal, QC, Canada. ACM, New York, NY, USA. [conference paper]
2018	**Niezink, N.M.D.** and T.A.B. Snijders (2018). Continuous-time modeling of panel data with network structure. In K. van Montford, J.H.L. Oud & M. Voelkle (Eds.), Continuous time modeling in the behavioural and related sciences. Cham, Switzerland: Springer.
2018	Tropf, F.C., **N.M.D. Niezink**, and T. Kretschmer (2018). Causality and pleiotropy in the association between victimization in adolescence and depression in adulthood in the UK. Twin Research and Human Genetics, 21(1), 33–41.
2017	**Niezink, N.M.D.** and T.A.B. Snijders (2017). Co-evolution of social networks and continuous actor attributes. The Annals of Applied Statistics, 11(4), 1948–1973.
2016	**Niezink, N.M.D.** (2016). Netwerkdynamiek ontrafelen. [To unravel network dynamics]. Sociologie Magazine, 24(4), 26–28.

Grants and awards

2022 - 2023	CMU Provost's Inclusive Teaching Fellowship for the project 'Faces of statistics' This project focuses on improving inclusion by showing undergraduate students in an introductory statistical inference class that Statistics has many faces, both as a field and in terms of those who practice it.
2022 - 2024	Richard King Mellon Foundation grant for the project 'Evaluating gamified pediatric diabetes education', PI: Rema Padman, CMU (Co-investigator)
2021 - 2024	NIH/National Library of Medicine grant for the project 'Leveraging YouTube video analytics for patient education: A digital therapy tool for clinicians to retrieve and recommend understandable videos on chronic disease management', PI: Rema Padman, CMU (Co-investigator, 1R01LM013443-01A1)
2020 - 2023	NSF Regular Research Grant in the Methodology, Measurement, and Statistics (MMS) Program for the project 'Statistical Models for Three-Way Social Network Dynamics' (PI, SES-2020276)
2020 - 2021	Russell Sage Foundation Small Grant in Computational Social Science for the project 'Learning from wiki surveys for large-scale collaborative ideation' (PI, G-2003-22461)
Jul 2019	NIH grant 'Teens with type 1 diabetes: A focus on friendship', PI: Vicky Helgeson, CMU (Co-PI)
Jun 2019	Nominated by the Faculty of Behavioral and Social Sciences for the Wierenga-Rengerink PhD Prize for the best dissertation of the University of Groningen
Jan 2019	CMU Berkman Faculty Development Fund grant for the project 'Modeling the Dynamics of Criminal Networks based on Cooffending Events' (PI)
Apr 2013	NWO (Dutch NSF) Research Talent grant for the project 'Co-Evolution of Networks and Real-Valued Actor Attributes' (NWO 406-12-165, full 3 year research funding)
Jul 2012	Full stipend for participation in the project-based summer school in Computational Biology and Bioinformatics, University of Oxford
Jun 2012	Teaching Assistant of the Year for the studies Mathematics and Applied Mathematics, elected by the students
Dec 2011	Excellent Students scholarship, awarded by the Groningen University Fund (for a research internship at Nuffield College, University of Oxford)

Research visits

Jul 2019	Visiting Scholar at Institute of Criminology, University of Cambridge, hosted by Paolo Campana
Jan - Mar 2015	Research visit to Mark Handcock, Department of Statistics, UCLA
	Topic: Particle filtered MCMC-MLE for exponential random graph models
Jan - Apr 2012	Junior Visiting Scholar at Nuffield College, University of Oxford
Apr - Jun 2011	Research intership at Dutch National Aerospace Laboratory, Amsterdam

Talks

INVITED TALKS

Fall 2022	Stanford Research on Algorithms and Incentives in Networks seminar
May 2022	Modeling the dynamics of network perceptions. – AMS Spring Western Virtual Sectional Meeting, Special Session on Interactions Between Probability and Statistics, virtual
Apr 2022	Modeling actor dynamics on social networks. – Novartis, virtual
Oct 2021	Social network analysis. – CMU American Statistical Association Meeting
Jun 2021	Modeling network dynamics and dynamics on networks. – Summer Institute for Computational Social Science, Beijing
May 2021	Statistical analysis of social networks. – Community for Advanced Methodological Learning, Department of Psychology, University of Pittsburgh
Apr 2021	Bringing perspective into dynamic network analysis. – Mitchell Centre for Social Network Analysis, University of Manchester
Mar 2021	Data science for digital democracy. – Women in Data Science Pittsburgh @CMU, virtual conference
Feb 2021	Modeling social influence on dynamic and static networks. – Statistics & Probability seminar, School of Mathematical Sciences, University of Nottingham
Jan 2021	Bringing perspective into dynamic network analysis. – 2021 Workshop on Statistical Network Analysis and Beyond
Jan 2020	Bringing perspective into dynamic network analysis. – Science of Networks in Communities (SONIC) research group, Northwestern University
Oct 2018	Opponent at the defense of Gennady Zavyalov, on his dissertation 'Analyzing the Dynamic Interdependence of Network Structure and Performance in Board Interlocks', University of Stavanger Business School
Mar 2017	No longer discrete: Modeling the dynamics of social networks and continuous actor attributes. – Department of Statistics, Penn State University
Mar 2017	No longer discrete: Modeling the dynamics of social networks and continuous actor attributes. – Department of Statistics, Carnegie Mellon University
Aug 2016	Modeling the dynamics of social networks and continuous actor attributes. – Workshop Network Science and its Applications, Isaac Newton Institute for Mathematical Sciences, Cambridge
Mar 2015	Co-evolution of social networks and continuous actor attributes. – Social network analysis group seminar, Department of Statisics, UCLA
Feb 2015	Co-evolution of social networks and continuous actor attributes. – CANA Social networks meeting, Department of Preventive Medicine, University of Southern California
Mar 2013	ODE, RDE and SDE models of cell cycle dynamics and clustering. – Statistics reading group, Department of Mathematics, University of Groningen
Feb 2013	Co-evolution of social networks and continuous actor attributes, and the demystification of the many ministeps. – Statistical network modeling seminar, Nuffield College, University of Oxford

CONTRIBUTED TALKS

Jul 2022	Social influence on dynamic networks: Modeling in continuous time. – XLII Sunbelt Social Networks Conference, Cairns
Sep 2021	Continuous-time modeling of social influence on static networks. – 5th European Conference on Social Networks, virtual

Jul 2021	Continuous-time modeling of social influence on static networks. – Networks 2021: A Joint Sunbelt and NetSci Conference, virtual
Dec 2019	Modeling the dynamics of social network perceptions. – CMStatistics 2019, London
Sep 2019	When thing turns sour: A network event study of violence among organized crime members. – 4th European Conference on Social Networks, Zurich
Jun 2019	Network analysis: A talk about assumptions. – Summer Institute in Computational Social Science, Princeton University
Apr 2019	Offline consequences of echo chambers. – 4th International Workshop on Social Sensing (SocialSense'19), Montreal
Dec 2018	Stochastic differential equation modeling of social influence in networks. – CMStatistics 2018, Pisa
Nov 2018	When things turn sour: Exploring violence by organized crime members using a longitudinal event-based perspective. – North American Social Networks Conference, Washington
Jun 2018	Continuous versus discretized behavior in stochastic actor-oriented models. – XXXVIII Sunbelt Social Networks Conference, Utrecht
Jun 2018	Modeling the dynamics of social networks and continuous actor attributes. – NetSci 2018, Paris
Jul 2016	Modeling the dynamics of social networks and continuous actor attributes. – World Congress in Probability and Statistics, Toronto
Jun 2016	A matter of accuracy: Standard errors in stochastic actor-oriented models. – European Conference on Social Networks II, Paris
Jul 2015	Always in interaction: Continuous-time modeling of panel data with network structure. – European Meeting of Statisticians, Amsterdam
Jun 2015	What is it like to be discrete? Continuous behavior variables in stochastic actor-oriented models. – XXXV Sunbelt Social Networks Conference, Brighton
Jul 2014	Always in interaction: Continuous time modeling of panel data taking into account social embeddedness. – VI European Congress of Methodology, Utrecht
Jul 2014	Continuously or discretely: How to analyze continuous dependent actor attributes in stochastic actor-oriented models. – European Conference on Social Networks I, Barcelona
Jun 2013	Co-evolution of networks and continuous actor attributes: Modeling opportunity and mechanisms for change. – ARS'13 International Workshop 'Networks in space and time', Rome
Mar 2013	Co-evolution of social networks and continuous actor attributes. – XXXIII Sunbelt Social Networks Conference, Hamburg
Jan 2013	Co-evolution of social networks and continuous actor attributes. – Young European Statisticians Workshop, Eindhoven

Supervision

ongoing	Joshua Choi, BSc in Statistics and Machine Learning, Dietrich Senior Honors thesis – *The effect of relative academic standing in students' social networks on academic growth*
ongoing	Peem Lerdputtipongporn. PhD in Statistics and Data Science, jointly supervised with Larry Wasserman – *Modeling the length of hospital stay of sepsis patients* (Advanced Data Analyis project)
ongoing	Anni Hong. PhD in Statistics and Data Science – *Modeling multiplex networks*
ongoing	Shihan Li. PhD in Public Policy and Management, jointly supervised with David Krackhardt – *The effects of networks in organizations on well-being and career success*
2022	Sana Lakdawala. MSc in Machine Learning (before: Dietrich Senior Honors thesis, BSc) – *Analyzing multilateral sanctions using three-way network analysis*
2021	Weichen Wu. PhD in Statistics and Data Science, jointly supervised with Brian Junker – *Statistical methodology for wiki survey data* (Advanced Data Analyis project)
2021	Edric Eun. Summer Undergraduate Research Apprenticeship (BSc) – *Modeling social influence on static networks using stochastic differential equations*
2021	Xiaoyi Yang. PhD in Statistics and Data Science, jointly supervised with Rebecca Nugent

	– *Learning social networks from text data*
2020	Yuting Shi. MSc in Electrical Engineering
	– *Relational event models for food sharing in a community in Nicaragua*
2020	Jiayi Pan. BSc in Statistics and Data Science, and Yongqi Zhong. PhD in Epidemiology, Pitt
	– *A network view on capacity building in evidence synthesis in sub-Saharan Africa*
2019	Matt Crespi. PhD in Public Policy and Management, jointly supervised with David Krackhardt
	– *Examining physician referral networks and hospital performance*
2015	Lianne Jansen. Master's thesis Mathematics, jointly supervised with Ernst Wit
	– *Co-evolution of friendship and academic performance in an international setting*
2014	Ferdi Doddema. Master's thesis Mathematics Education, jointly supervised with Ernst Wit
	– *Introduction to the stochastic actor-oriented model: A description and application of the model*

Committee member

ongoing	Max Rubinstein. PhD in Statistics & Data Science and Public Policy, Carnegie Mellon University
ongoing	Wanshan Li. PhD in Statistics and Data Science, Carnegie Mellon University
ongoing	Giacomo Ceoldo. PhD in Computational Science, Università della Svizzera italiana
2021	Shengming Luo, PhD in Statistics and Data Science, Carnegie Mellon University
2020	Kayla Frisoli. PhD in Statistics and Data Science, Carnegie Mellon University
2018	Momin Malik. Data Analysis Project, Machine Learning, Carnegie Mellon University
2018	Gennady Zavyalov. PhD at Faculty of Social Science, University of Stavanger Business School

Service

2022	Co-organizer of the session 'Modeling Network Dynamics' at the 6th European Conference on Social Networks, Greenwich
2022	Co-organizer of the sessions 'Modeling Network Dynamics' and 'Modeling Social Influence' at XLII Sunbelt Social Networks Conference, Cairns
2021	Co-organizer of the sessions 'Modeling Network Dynamics' and 'Modeling Social Influence' at Networks 2021: A Joint Sunbelt and NetSci Conference, Washington DC
2021	Member of a National Science Foundation review panel for the DMS Statistics Program
2020	Co-organizer of the sessions 'Modeling Network Dynamics' and 'Criminal Networks' at the 2020 Sunbelt Virtual Conference
2015 - present	Occasional reviewer for: BMJ Open, Computational Statistics and Data Analysis, Journal of the American Statistical Association, Journal of the Royal Statistical Society - Series C, Methodology, Multivariate Behavioral Research, Sociological Methods & Research, Sociological Methodology, Network Science, PlosOne, Statistical Methods & Applications, Statistica Neerlandica

Carnegie Mellon University

2021 - present	CMU Open Science & Data Collaborations advisory board
2020 - present	Organizer of the 'Networkshop', weekly research meetings on network analysis
2020 - present	Member of the StatDS Wellness Network (Mental Health First Aid certificate, Dec 2020)
2018 - present	Department of Statistics & Data Science: Governance evaluation committee (2018-2019), Faculty search committtee (2018-2019), Strategy and policy committtee (2019-present), ASML Scholarship selection committee (2021), PhD admissions committee (2021), DEI working group (2022-present)
2021	Heinz College of Information Systems and Public Policy: Faculty search committee
2021	Dietrich College: Space committtee

University of Groningen

2015 - 2017	Member of the University Committee for Academic Practice (UCW), an independent advisory committee of the Board of the University of Groningen
2007 - 2011	Member of the Curriculum Committee Mathematics

Teaching

Carnegie Mellon University

2018 - present 36-226 Introduction to Statistical Inference (Spring 2019, 2020, 2021, 2022)
36-717 Statistical Network Models I (Fall 2021; newly developed)
36-718 Statistical Network Models II (Fall 2021; newly developed)
36-311 Statistical Analysis of Networks (Fall 2018, 2019; newly developed)
36-490 Undergraduate Research (Spring 2018)

University of Groningen

Apr - Jul 2017 Department of Sociology, lecturer for SOBA221 Social Networks

2013 - 2017 Department of Sociology, teaching assistant for Statistics 4 (2013), Introduction into R (2014), Social Networks (2015, 2016), Applied Statistics (2016, 2017)

2009 - 2011 Department of Mathematics, mentor of first-year students

2006 - 2011 Department of Mathematics, teaching assistant for Calculus I (2009), Crash course Calculus I (2009), Integrating Projects (2006, 2007), Linear Algebra (2007, 2008, 2009, 2010), Mathematics A (2006), Mathematics B (2006, 2007), Orientation Mathematics (2010)

Workshop 'Analyzing the dynamics of networks and continuous behavior with RSiena' at the

Jul 2022 XLII Sunbelt Social Networks Conference, Cairns

Sep 2021 5th European Conference on Social Networks, virtual

Jun 2021 Networks 2021: A Joint Sunbelt and NetSci Conference, virtual

Jan 2021 RSiena winter school, University of Groningen

Dec 2019 Duisterbelt workshop, University of Groningen

Sep 2019 4th European Conference on Social Networks, Zurich

Feb 2016 Advanced RSiena Users Meeting, ETH Zürich, co-taught with Tom Snijders and Christian Steglich

Jan - Aug 2009 Willem Lodewijk Gymnasium, mathematics teacher for two first form classes

2007 - 2015 UOCGMarket BV, teacher and material developer highschool final exam training Mathematics B

2004 - 2010 Tutor for highschool students in French, Latin and Mathematics