CURRICULUM VITAE

Contact Details

Name:	dr. D. Veen (Duco)
Website:	https://www.ducoveen.com/

Relevant Working Experience

08/2020 – current	**Assistant professor**
	University Medical Center Utrecht, Julius Center, Global Health
	The main work is related to the COVID-RED (Remote Early Detection) project.
08/2020 – current	**Extraordinary Professor**
	North West University
	Appointed as Extraordinary Professor in Optentia Research Focus Area.
08/2020 – current	**Data Scientist**
	Julius Clinical
	The main work is related to the COVID-RED (Remote Early Detection) project.
06/2020 – current	**Core Developer**
	Stan Development Team
	Stan is a state-of-the-art platform for statistical modeling and high-performance statistical computation. Thousands of users rely on Stan for statistical modeling, data analysis, and prediction in the social, biological, and physical sciences, engineering, and business. I was added to the developer team because of my work on shinystan.
12/2019 – 08/2020	**Postdoc**
	Utrecht University, Faculty of Social Sciences, Department of Methodology & Statistics
	Continuation of research in Bayesian statistics. Data analyses for National OLVG Corona Check App related to the Covid-19 crisis.
12/2019 – 07/2020	**Scientific Project Manager**
	University Medical Center Utrecht
	Scientific project manager under Rick Grobbee, assisting in setting up a collaborative effort on artificial intelligence for health between four major Dutch academic institutions. Additionally, involved in the team for a Horizon 2020 application.
08/2016 – 12/2019	**PhD Candidate**
	Utrecht University, Faculty of Social Sciences, Department of Methodology & Statistics
	Alternative Information: Bayesian Statistics, Expert Elicitation and Information Theory in the Social Sciences (link).
	Dissertation written under the supervision of Rens van de Schoot.
02/2019 - 04/2019	**Visiting Researcher**
	Columbia University, Stan Development Team, Bob Carpenter
	Work on annotation models with Bob Carpenter and development of the shinystan R package with Jonah Gabry.
09/2015 - 05/2016	**Internship**
	ProfitWise International
	Collaborating on the development of new statistical, business analytical, methods. After the development of the new methods we conducted studies at a staffing

	company and a large financial institution to test the methods that resulted from the collaboration.
06/2015 – 07/2015	**Data Analyst**
	University of Twente, Faculty of Behavioural, Management and Social Sciences, Department of Research Methodology, Measurement and Data Analysis
	Multilevel analysis on ICILS 2013 data using HLM software for Kennisnet foundation (Dutch expertise center on ICT in education).

Education

2014 – 2016	**Research Master - Methodology and Statistics in the behavioral, social and biomedical sciences (MSc) - Cum Laude**
	Utrecht University
	Courses: Survey data analysis, Multivariate statistics, Fundamentals of statistics, Computational inference with R, Psychometrics, Introduction to multilevel and structural equation modelling, Bayesian statistics, Clinical research designs, elective: survey track. Average grade 8,13 (GPA = 4.0)
2010 – 2014	**Bachelor Psychology (BSc)**
	University of Twente
	Minor: Origins (Cosmology, Biological evolution and Philosophy of Awareness)
	Bachelor Thesis: "*Multivariate analysis for using the Crosswise- and Triangular method*" (These are randomized response data collection methods, link)

Certificates

2020	**Good Clinical Practice GCP E6(R2) training**
	Julius Clinical
2016-2020	**Interuniversity Graduate School of Psychometrics and Sociometrics**
	Successful completion of graduate school program
2018	**What is psychometrics**
	University of Amsterdam, The Netherlands, 22-24 May 2018
2017	**Advanced course on using Mplus**
	Utrecht Summer School, Utrecht University, Utrecht, 10-14 July
	Transparency in Science
	University of Groningen, 19-20 April
	Introduction to Bayesian Networks and BayesiaLab
	Paris, 21-23 March
	Start to Teach
	Utrecht University, March 10
	Statistical Learning
	Leiden University, 25-27 January
2016	**Optimization and Numerical Methods in Statistics**
	KU Leuven, 15-16 November
	Sixth Annual JAGS and WinBUGS Workshop Bayesian Modeling for Cognitive Science
	University of Amsterdam, 15 - 19 August
2015	**Finance for Non-Financial Professionals**
	University of California, Irvine (link)
	Fundamentals of Management
	University of California, Irvine (link)

Professional Development

2016	**Covey Training - De Zeven Eigenschappen van Effectief Leiderschap**
	Rotterdam, December 9

Publications

Academic Publications	
2021	Van de Schoot, R., Depaoli, S., Gelman, A., King, R., Kramer, B., Märtens, K., Tadesse, M. G., Vannucci, M., Veen, D., Willemsen, J., & Yau, C. (2021). Bayesian Statistics and Modelling. *Nature Reviews.* (manuscript accepted for publication).
	de Klerk, M., de Bree, E., Veen, D., & Wijnen, F. (2021). Speech Discrimination in Infants at Family Risk of Dyslexia: Group and Individual-based Analyses. *Journal of Experimental Child Psychology.* (manuscript accepted for publication).
2020	Schat, E., van de Schoot,. R., Kouw, W. M., Veen, D., & Mendrik, A. M. (2020) The Data Representativeness Criterion: Predicting the Performance of Supervised Classification Based on Data Set Similarity. *PLoS ONE* 15(8): e0237009. https://doi.org/10.1371/journal.pone.0237009
	Veen, D., Egberts, M. R., van Loey, N. E. E., & van de Schoot, R. (2020) Expert Elicitation for Latent Growth Curve Models: The Case of Posttraumatic Stress Symptoms Development in Children With Burn Injuries. *Front. Psychol.* 11:1197. doi: 10.3389/fpsyg.2020.01197
2019	Veen D., & Klugkist, I., (2019) Standard Errors, Priors, and Bridge Sampling: A Discussion of Liu et al. *Journal of the Korean Statistical Society.*
	de Klerk, M., Veen, D., Wijnen, F. & de Bree, E. (2019). A Step Forward: Bayesian Hierarchical Modelling as a Tool in Assessment of Individual Discrimination Performance. *Infant Behavior and Development.*
	Meershoek, A.J.A., de Vries, E.E., Veen, D., den Ruijter, H.M., & de Borst, G.J. (2019). Meta-analysis of the outcomes of treatment of internal carotid artery near occlusion. *British Journal of Surgery,* 106(6), 665-671.
	Veen, D., Stoel, D., Schalken, N., Mulder, K., & van de Schoot, R. (2019). Correction: Veen, D.; Stoel, D.; Schalken, N.; Mulder, K.; Van de Schoot, R. Using the Data Agreement Criterion to Rank Experts' Beliefs. Entropy 2018, 20, 592. *Entropy*, 21(3), 307.
2018	Veen, D., Stoel, D., Schalken, N., Mulder, K., & van de Schoot, R. (2018). Using the Data Agreement Criterion to Rank Experts' Beliefs. *Entropy*, 20(8). Doi: 10.3390/e20080592
	Fox, J.-P., Veen, D., & Klotzke, K. (2018). Generalized Linear Mixed Models for Randomized Responses. *Methodology*. http://dx.doi.org/10.1027/1614-2241/a000153
2017	Veen, D., Stoel ,D., Zondervan-Zwijnenburg, M. & van de Schoot, R. (2017) Proposal for a Five-Step Method to Elicit Expert Judgment. *Front. Psychol*. 8:2110. doi: 10.3389/fpsyg.2017.02110
Under review	Schulz, S., Zondervan-Zwijnenburg, M., Nelemans, S. A., Veen, D., Oldehinkel, A. J., Branje, S., & Meeus, W. (2020) *Transmission of Internalizing Symptoms through Mother-Adolescent Interaction Behavior: A Bayesian Approach Using Informative Priors.* (manuscript under review).

van de Schoot, R., Winter, S., Griffioen, E., Grimmelikhuijsen, S., Arts, I., Veen, D., & Tummers, L. (2020). *Using Questionable Research Practices to Survive in Academia*. (manuscript under review).

Bresser, P., Franks, B., de Wit, N., Veen, D., Reesink, H., van de Wijgert, J., Dohmen, D., van den Bosch, M., & Grobbee, D. (2020). *Nationwide implementation of The Corona Check digital service for COVID-19 in the Netherlands: A novel tool for pandemic control.* (manuscript under review).

Book Chapters
2020   Veen, D., & Egberts, M. R. (2020). The importance of collaboration in Bayesian analyses with small samples. In R. Van de Schoot & M. Miočević (Eds.), *Small sample size solutions: A guide for applied researchers and practitioners*: Routledge.

Van de Schoot, R., Veen, D., Smeets, L., Winter, S. D., & Depaoli, S. (2020). A tutorial on using the WAMBS-checklist to avoid the misuse of Bayesian statistics. In R. Van de Schoot & M. Miočević (Eds.), *Small sample size solutions: A guide for applied researchers and practitioners*: Routledge.

Technical Report
2015   Luyten, H., Veen, D. & Meelissen, M.R.M. (2015). *De relatie tussen leerling- en schoolkenmerken en digitale geletterdheid van 14-jarigen: secundaire analyses op de data van ICILS-2013*. Enschede: Universiteit Twente (link)

Software
R-packages Fox, J-P., Klotzke, K., & Veen, D. (2016). GLMMRR: Generalized Linear Mixed Model (GLMM) for Binary Randomized Response Data. R package version 0.2.0. Available from https://CRAN.R-project.org/package=GLMMRR

Gabry, J. & Veen, D. (2020). shinystan: Interactive Visual and Numerical Diagnostics and Posterior Analysis for Bayesian Models. R package version 3.0. Available from https://github.com/stan-dev/shinystan/tree/v3-alpha

Shiny applications For a variety of shiny web applications see my personal website: https://www.ducoveen.com/#projects

Tutorials

Heo, I., Veen, D., & van de Schoot, R. (2020). *JASP for beginners.* Available from: https://www.rensvandeschoot.com/tutorials/jasp-for-beginners/

Heo, I., Veen, D., & van de Schoot, R. (2020). *R for beginners.* Available from: https://www.rensvandeschoot.com/tutorials/r-for-beginners/

Behrens, L., Veen, D., & van de Schoot, R. (2018). *Elicit Expert Judgement in Five Steps.* Available from: https://www.rensvandeschoot.com/tutorials/expert-judgement/

Presentations

Invited

2020   Veen, D. (2020, September). Expert kennis, onzekerheid en statistiek. Presentation delivered at end symposium for the data science traineeship of the Dutch Healthcare Authority (NZa), Authority for Consumers & Markets (ACM) and the Netherlands Authority for Financial Markets (AFM). The Hague, the Netherlands.

     Veen, D. (2020, April). On Expert Elicitation Experiences. Online presentation delivered to members of the departments of Computer Science of Aalto University and the University of Helsinki.

2019   Veen, D. (2019, October). On shinystan 3.0. Presentation delivered at the Second Dutch Stan meetup, Dutch Healthcare Authority, Utrecht, the Netherlands

     Veen, D. (2019, April). On expert elicitation and evaluation. Presentation delivered at statistics student seminar, Columbia University, New York, NY, USA.

2018   Meershoek, A.J.A., Veen, D. (2018, May). Duo presentation: Treatment of internal carotid artery NEar occlusiON (NEON study): An individual patient data meta-analysis. Presentation delivered at research meeting of UMC Utrecht Department of Vascular Surgery, Utrecht, the Netherlands.

     Veen, D. (2018, February). On Using Expert Knowledge as Prior Information. Presentation delivered at Statistics Netherlands (CBS), Heerlen, the Netherlands.

International

2019   Veen, D., Egberts, M. & van de Schoot, R. (2019, May). On Elicitation of Prior Information for Latent Change Analysis. Part of the symposium entitled, "Risks of Default Priors in Bayesian Structural Equation Models with Small Samples and Two Approaches on How to Avoid Those Risks" at the 31st Association for Psychological Science (APS) annual convention, Washington, D.C., USA.

2018   Egberts, M., Veen, D., van de Schoot, R. & van Loey, N. (2018, August). Relating the development of maternal Post-Traumatic Stress to Health Related Quality of Life of children with severe burn injuries. Poster presented at StanCon 2018, Helsinki, Finland.

     Veen, D., Klaassen F. (2018, July) Duo presentation: On reasons to use subjective Bayes. Presentation delivered at VIII European Congress of Methodology. Part of the symposium entitled, "Applying Subjective Bayes to Real Life Data", Jena, Germany.

     Veen, D., Stoel, D., Schalken, N. & van de Schoot, R. (2018, July). Using the Data Agreement Criterion to Rank Experts' Beliefs. Presentation delivered at Bayesian Young Statisticians Meeting (BaYSM) 2018, Coventry, Great Britain.

     Egberts, M. & Veen, D. (2018, March) Duo presentation: Increasing Power of Statistical Analyses Through Collaboration. Presentation delivered at Small Sample Size Solutions (S^4) Conference, Utrecht, the Netherlands.

     de Klerk, M. & Veen, D. (2018, March) Duo presentation: Improving the Assessment of Individual Phoneme Discrimination Performance. Presentation delivered at Small Sample Size Solutions (S^4) Conference, Utrecht, the Netherlands.

2017   Veen, D., van Loey, N.E.E., van Baar, A.L., Wijnen, F.N.K. & van de Schoot, R. (2017, August). Eliciting and Using Expert Information in Latent Growth Curve Models. Poster presented at 18th European Conference on Developmental Psychology, Utrecht, the Netherlands.

Veen, D., Izeboud, E. & van de Schoot, R. (2017, May). Systematic Review of Elicitation Software: Expert Knowledge as a Source of Data. Part of the symposium entitled, "Experts and Animals: How Can They Help Us?" at the 29th Association for Psychological Science (APS) annual convention, Boston, MA, USA.

Veen, D., Stoel, D., & van de Schoot, R. (2017, May). Using the Data Agreement Criterion to Rank Experts' Beliefs. Part of the symposium entitled, "What the Dutch can do with prior information (and you too)" at the 2017 Modern Modeling Methods (M3) Conference, Storrs, CT, USA.

National

2019   Veen, D., Egberts, M. & van de Schoot, R. (2019, June). On Elicitation of Prior Information for Latent Change Analysis. Presentation delivered at 34th IOPS Summer Conference, Utrecht, the Netherlands.

2018   Veen, D. & van de Schoot, R. (2018, June). How understanding prior-data compromise can lead to sample size determination. Poster presented at 33rd IOPS Summer Conference, Amsterdam, the Netherlands.

2016   Veen, D., van Loey, N.E.E., van Baar, A.L., Wijnen, F.N.K. & van de Schoot, R. (2016, November). Eliciting and Using Expert Information in Latent Growth Curve Models: Research Plan. Poster presented at VNOP-CAS-ISED research days 2016, Leiden, the Netherlands.

Institutional

2018   Veen, D. & de Klerk, M. (2018, July). Real data application: Bayesian Hierarchical Modelling as a Tool in Assessment of Individual Discrimination Performance. Presentation delivered at Utrecht University Summer school: Advanced Multilevel Analysis, Utrecht, the Netherlands.

Veen, D. (2018, January). The Effects of Using Different MCMC Samplers. Presentation delivered at Utrecht University for the Bayesian Statistics working group, Utrecht, the Netherlands.

2017   Veen, D. (2017, June). Expert Knowledge as a Source of Data. Presentation delivered at Utrecht University at the 1st Experts Data (Dis)Agreement working group meeting, Utrecht, the Netherlands.

2016   Mulder, K.T., Veen, D. (2016, October). Bayes Meeting Default Priors. Presentation delivered at Utrecht University for the Bayesian Statistics working group, Utrecht, the Netherlands.

Veen, D., Stoel, D., van de Schoot, A.G.J. (2016, September). Using the Data Agreement Criterion to Rank Experts' Beliefs. Presentation delivered at Utrecht University for the Bayesian Statistics working group, Utrecht, the Netherlands.

Grants

2017   **Education Incentive Funds - €14,300**
Development of Shiny applications for educational purposes
Miočević, M., Aarts, E., Klaassen, F., Lek, K.M., Mulder, K.T., Namesnik, K.T., Veen, D., Zondervan-Zwijnenburg, M.A.J.

Awards

2017	**The EADP/ERU Best Poster Award**
	Received for the poster presented at the 18th European Conference on Developmental Psychology, Utrecht, the Netherlands.

Teaching Experience

Courses

2020	**Epidemiology and Big Data**
	University Medical Center Utrecht – Course Coordinator
	Advanced R for Life Sciences
	Utrecht University – Lecturer
	North West University – Opentia: R training
	On continuous basis lectures on R and Rstudio
2019	**South Africa Stats Camp Training Seminar**
	Hammanskraal, Gauteng Province, South Africa
	Utrecht University Summer school: Statistical Programming with R
	Utrecht University – Practical's
	Utrecht University Summer school: Introduction to Structural Equation Modeling using Mplus
	Utrecht University – Lecturer
2018	**Utrecht University Summer school: Statistical Programming with R**
	Utrecht University – Practical's
	Methoden, Technieken en Statistiek 3 (Bachelor)
	Utrecht University – Seminars
2017	**Methoden, Technieken en Statistiek 1 (Bachelor)**
	Utrecht University – Seminars and Practical's
	Methoden, Technieken en Statistiek 3 (Bachelor)
	Utrecht University – Seminars
2016	**Methoden en Statistieken van Sociaal Wetenschappelijk Onderzoek 2 (pre-master)**
	Utrecht University – Practical's
	Methoden, Technieken en Statistiek 1 (Bachelor)
	Utrecht University – Seminars and Practical's
2015	**Survey Data Analysis (Research Master)**
	Utrecht University – Q&A Sessions

Thesis Supervision

2017-2018	Schalken, N. Research Master Thesis
	Schat, E. Research Master Thesis
2015	Klotzke, K. Bachelor Thesis

Professional Services

Ad-Hoc Reviewer

2019	Statistics in Transition new series
2017	European Journal of Developmental Psychology

Software Proficiency

Statistical Software

Advanced:	R including rstan, lavaan, blavaan, lme4 and shiny
	HLM, SPSS, LaTeX, M*plus*
Basic/Intermediate:	OpenBugs

Professional Affiliations

2018 - present	Open Science Community Utrecht
2017 - 2018	European Association of Developmental Psychology (EADP)
2017 - 2018	The International Society for Bayesian Analysis (ISBA)
2017	The Econometric Society
2017, 2019	Association for Psychological Science (APS)
2016 - present	Interuniversity graduate school of Psychometrics and Sociometrics (IOPS)