# **CURRICULUM VITAE**

# **Contact Details**

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# **Relevant Working Experience**

8/2016 - present PhD Candidate

Utrecht University, Faculty of Social Sciences, Department of Methodology &

Statistics

Developing new methodology to use expert knowledge as input in latent growth

curve models to counterbalance issues of small sample sizes.

2/2019 - 4/2019 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.

9/2015 - 5/2016 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.

9/2015 - 12/2015 Student Assistant for Research Master Course Survey Data Analysis

Utrecht University & University of Twente

Assisting in the structuring of practical's and teaching in the form of supporting sessions for the students in which they can ask questions about lectures and

practical's.

6/2015 - 7/2015 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** 

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 Finance for Non-Financial Professionals University of California, Irvine (link)

Fundamentals of Management
University of California, Irvine (link)

Professional Development

2015

2016 Covey Training - De Zeven Eigenschappen van Effectief Leiderschap

Rotterdam, December 9

## **Publications**

# Academic Publications

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

van de Schoot, R., Winter, S., Griffioen, E., Grimmelikhuijsen, S., Arts, I., Veen, D., Tummers, L. (2019). *Using Questionable Research Practices to Survive in Academia*. (manuscript under review).

Veen, D., Egberts, M. R., van Loey, N. E. E., & van de Schoot, R. (2019) *Expert Elicitation in the Social Sciences: The case of Posttraumatic Stress Symptoms Development in Children with Burn Injuries*. (manuscript under review).

# **Book Chapters**

Accepted

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 (<u>link</u>)

#### Software

2018

Veen, D., Schalken, N., & van de Schoot R. (2018). DAC: Calculating Data Agreement Criterion Scores to Rank Experts Based on Their Beliefs. R package version 0.1.1. https://CRAN.R-project.org/package=DAC

Veen, D. (2018). Effects-Coding: Calculate your own Confirmatory Factor Analysis using Effects Coded parametrization. Retrieved from https://dveen.shinyapps.io/Effects-Coding/

Veen, D. (2018). Application for education: demonstrate sampling distributions for correlations. Retrieved from

https://utrecht-university.shinyapps.io/samplingcorrelations/

Veen, D. (2018). Application for education: demonstrate correlation and relation with regression. Retrieved from https://utrecht-university.shinyapps.io/correlation/

2017 Veen, D. (2017). Five-Step Method Elicitation App. Retrieved from

https://utrecht-university.shinyapps.io/elicitation/

Veen, D. (2017). Kullback-Leibler Divergence explorer with (skewed) normal distributions. Retrieved from https://utrecht-university.shinyapps.io/klapp

2016 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

## **Presentations**

### Invited

2019

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 31<sup>st</sup> 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<sup>4</sup>) 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<sup>4</sup>) 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 18<sup>th</sup> 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 29<sup>th</sup> 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 34<sup>th</sup> 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 33<sup>rd</sup> 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

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 Survey Data Analysis (Research Master)

Utrecht University – Q&A Sessions

**Thesis Supervision** 

2015

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, Mplus

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)