

CURRICULUM VITAE

Contact Details

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Relevant Working Experience

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| 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 developers 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. |
| 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

- 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

- 2020 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 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).
- 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*. (manuscript under review).
- de Klerk, M., de Bree, E., Veen, D., & Wijnen, F. (2019). *Speech Discrimination in Infants at Family Risk of Dyslexia: Group and Individual-based Analyses* (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>

Presentations

Invited

2020

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 (S⁴) 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 (S⁴) 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.
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Awards

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