CURRICULUM VITAE

Koen P. Derks
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(a) Education

Institution	*Location*	*Subject*	*Graduated*
Nyenrode Business University	Breukelen, NL	Audit Methodology	Ph.D., 2018 – 2022
University of Amsterdam	Amsterdam, NL	Psychological Methods	M.Sc. *with merit*, 2018
University of Amsterdam	Amsterdam, NL	Psychology	B.Sc. *with merit*, 2016

(b) Employment

Period	*Function*	*Organization*
2023 – present	Assistant professor	Nyenrode Business University
2016 – 2022	Developer	JASP (University of Amsterdam)
2017 – 2018	Student assistant	Faculty of Economics and Business (University of Amsterdam)
2016 – 2017	Student assistant	Center of Blended Learning (University of Amsterdam)
2016 – 2016	Teacher of statistics	Tentamentrainingen.nl

(c) Qualifications

Name	*Grantor*	*Obtained*	*Expires*
BKO (Unversity Teaching Qualitication)	Nyenrode Business University	01-06-2020	–
BKE (Unversity Examinaiton Qualitication)	CITO	01-01-2022	31-12-2026

(d) Software

Name	*Platform*	*Website*
jfa (R package)	R (CRAN)	koenderks.github.io/jfa
JASP for Audit (Audit module)	JASP	jasp-stats.org
Machine Learning module	JASP	jasp-stats.org
Bain module	JASP	jasp-stats.org
Quality control module	JASP	jasp-stats.org

(e) Articles

Published

1. **Derks**, K., de Swart, J., Wagenmakers, E.-J., and Wetzels, R. (2025). The Bayesian approach to audit evidence: Quantifying statistical evidence using the Bayes factors. *Auditing: A Journal of Practice & Theory*, 44(1):55–71. doi: 10.2308/AJPT-2021-086.

2. **Derks**, K., Mensink, L., de Swart, J., and Wetzels, R. (2024). Toepassing van data-analyse om de steekproef te rationaliseren. *Maandblad voor Accountancy en Bedrijfseconomie*, 98(4):131–143.

3. Steens, B., Bots, J., and **Derks**, K. (2024). Developing digital competencies of controllers: Evidence from the netherlands. *International Journal of Accounting Information Systems*, 52. doi: 10.1016/j.accinf.2023.100667.

4. **Derks**, K., de Swart, J., and Wetzels, R. (2023). Open-source software als brug tussen de auditor en de statisticus. *Maandblad voor Accountancy en Bedrijfseconomie*, 97:17–28. doi: 10.5117/mab.96.78836.

5. Heck, D. W., Boehm, U., Böing-Messing, F., Bürkner, P.-C., **Derks**, K., Dienes, Z., Fu, Q., Gu, X., Karimova, D., Kiers, H., Klugkist, I., Kuiper, R. M., Lee, M. D., Leenders, R., Leplaa, H. J., Linde, M., Ly, A., Meijerink-Bosman, M., Moerbeek, M., Mulder, J., Palfi, B., Schönbrodt, F., Tendeiro, J., van den Bergh, D., van Lissa, C. J., van Ravenzwaaij, D., Vanpaemel, W., Wagenmakers, E.-J., Williams, D. R., Zondervan-Zwijnenburg, M., and Hoijtink, H. (2022). A review of applications of the Bayes factor in psychological research. *Psychological Methods*, 28(3):558–579. doi: 10.1037/met0000454.

6. **Derks**, K., de Swart, J., and Wetzels, R. (2022). Een Bayesiaanse blik op gestratificeerde steekproeven heeft voordelen voor de auditor. *Maandblad voor Accountancy en Bedrijfseconomie*, 96(1/2):37–46. doi: 10.5117/mab.96.78836.

7. **Derks**, K., de Swart, J., Wagenmakers, E.-J., Wille, J., and Wetzels, R. (2021a). JASP for Audit: Bayesian tools for the auditing practice. *Journal of Open Source Software*, 6(68):2733. doi: 10.21105/joss.02733.

8. **Derks**, K., de Swart, J., van Batenburg, P., Wagenmakers, E.-J., and Wetzels, R. (2021b). Priors in a Bayesian audit: How integration of existing information into the prior distribution can improve audit transparency and efficiency. *International Journal of Auditing*, 25(3):621–636. doi: 10.1111/ijau.12240.

9. van Doorn, J., van den Bergh, D., Dablander, F., van Dongen, N. N. N., **Derks**, K., Evans, N. J., Gronau, Q. F., Haaf, J. M., Kunisato, Y., Ly, A., and et al. (2021a). Strong public claims may not reflect researchers' private convictions. *Significance*, 18(1):44–45. doi: 10.1111/1740-9713.01493.

10. van Doorn, J., van den Bergh, D., Böhm, U., Dablander, F., **Derks**, K., Draws, T., Etz, A., Evans, N. J., Gronau, Q. F., Haaf, J. M., Hinne, M., Kucharský, Š., Ly, A., Marsman, M., Matzke, D., Gupta, A. R. K. N., Sarafoglou, A., Stefan, A., Voelkel, J. G., and Wagenmakers, E.-J. (2021b). The JASP guidelines for conducting and reporting a Bayesian analysis. *Psychonomic Bulletin & Review*, 28:813–826. doi: 10.3758/s13423-020-01798-5.

11. Ly, A., Stefan, A., van Doorn, J., Dablander, F., van den Bergh, D., Sarafoglou, A., Kucharský, S., **Derks**, K., Gronau, Q. F., Raj, A., Boehm, U., van Kesteren, E.-J., Hinne, M., Matzke, D., Marsman, M., and Wagenmakers, E.-J. (2020). The Bayesian methodology of Sir Harold Jeffreys as a practical alternative to the p value hypothesis test. *Computational Brain & Behavior*, 3(2):153–161. doi: 10.1007/s42113-019-00070-x.

12. van den Bergh, D., van Doorn, J., Marsman, M., Draws, T., van Kesteren, E.-J., **Derks**, K., Dablander, F., Gronau, Q. F., Kucharský, S., Gupta, A. R. K. N., Sarafoglou, A., Voelkel, J. G., Stefan, A., Ly, A., Hinne, M., Matzke, D., and Wagenmakers, E.-J. (2020). A tutorial on conducting and interpreting a Bayesian ANOVA in JASP. *L'Année psychologique*, 120(1):73–96. doi: 10.3917/anpsy1.201.0073.

13. Landy, J. F., Jia, M. L., Ding, I. L., Viganola, D., Tierney, W., Dreber, A., Johannesson, M., Pfeiffer, T., Ebersole, C. R., Gronau, Q. F., Ly, A., van den Bergh, D., Marsman, M., **Derks**, K., Wagenmakers, E.-J., Proctor, A., Bartels, D. M., Bauman, C. W., Brady, W. J., Cheung, F., Cimpian, A., Dohle, S., Donnellan, M. B., Hahn, A., Hall, M. P., Jiménez-Leal, W., Johnson, D. J., Lucas, R. E., Monin, B., Montealegre, A., Mullen, E., Pang, J., Ray, J., Reinero, D. A., Reynolds, J., Sowden, W., Storage, D., Su, R., Tworek, C. M., van Bavel, J. J., Walco, D., Wills, J., Xu, X., Yam, K. C., Yang, X., Cunningham, W. A., Schweinsberg, M., Urwitz, M., Collaboration, T. C. H. T., and Uhlmann, E. L. (2020). Crowdsourcing hypothesis tests: Making transparent how design choices shape research results. *Psychological Bulletin*, 146(5):451–479. doi: 10.1037/bul0000220.

14. **Derks**, K., Burger, J., van Doorn, J., Kossakowski, J. J., Matzke, D., Atticciati, L., Beitner, J., Benzesin, V., de Bruijn, A. L., Cohen, T. R. H., Cordesius, E. P. A., van Dekken, M., Delvendahl, N., Dobbelaar, S., Groenendijk, E. R., Hermans, M. E., Hiekkaranta, A. P., Hoekstra, R. H. A., Hoffmann, A. M.,

Hogenboom, S. A. M., Kahveci, S., Karaban, I. J., Kevenaar, S. T., te Koppele, J. L., wil Kramer, A., Kroon, E., Kucharský, Š., Lieuw-On, R., Lunansky, G., Matzen, T. P., Meijer, A., Nieper, A., de Nooij, L., Poelstra, L., van der Putten, W. J., Sarafoglou, A., Schaaf, J. V., van de Schraaf, S. A. J., van Schuppen, S., Schutte, M. H. M., Seibold, M., Slagter, S. K., Snoek, A. C., Stracke, S., Tamimy, Z., Timmers, B., Tran, H., Uduwa-Vidanalage, E. S., Vergeer, L., Vossoughi, L., Yücel, D. E., and Wagenmakers, E.-J. (2018). Network models to organize a dispersed literature: The case of misunderstanding analysis of covariance. *Journal of European Psychology Students*, 9(1):48–57. doi: 10.5334/jeps.458.

15. Wagenmakers, E.-J., Love, J., Marsman, M., Jamil, T., Ly, A., Verhagen, J., Selker, R., Gronau, Q. F., Dropmann, D., Boutin, B., Meerhoff, F., Knight, P., Raj, A., van Kesteren, E.-J., van Doorn, J., Smira, M., Epskamp, S., Etz, A., Matzke, D., de Jong, T., van den Bergh, D., Sarafoglou, A., Steingroever, H., **Derks**, K., Rouder, J. N., and Morey, R. D. (2017). Bayesian inference for psychology. part II: Example applications with JASP. *Psychonomic Bulletin & Review*, 25(1):58–76. doi: 10.3758/s13423-017-1323-7.

Under Review

1. **Derks**, K., Mensink, L., Smid, W., de Swart, J., and Wetzels, R. (2025a). Practical benefits of discounting historical audit samples using normalized power priors. *Under review*.
2. **Derks**, K., de Swart, J., and Wetzels, R. (2025b). Get over it! A hurdle approach to modeling audit samples with partial misstatements. *Under review*.
3. Mensink, L., de Swart, J., **Derks**, K., and Wetzels, R. (2024). Enhancing efficiency and flexibility in audits through Bayesian optional stopping. *Under review*.
4. **Derks**, K., Mensink, L., de Swart, J., Wagenmakers, E.-J., and Wetzels, R. (2024). Increasing efficiency in stratified audit sampling via bayesian hierarchical modeling. *Under review*.
5. **Derks**, K., de Swart, J., Wagenmakers, E.-J., and Wetzels, R. (2022). An impartial Bayesian hypothesis test for audit sampling. *Under review*.
6. Hiekkaranta, A. P., **Derks**, K., Achterhof, R., Bamps, E., Hageman, N., Janssens, J. J., Myin-Germeys, I., and Kirtley, O. J. (2023). Psychopathology and ruminating, savoring, and sharing in the daily lives of adolescents during the covid-19 pandemic. *Under review*.

(f) Books

1. Derks, K. (2024). *Statistical Audit Sampling with R*. Freely available from https://github.com/koenderks/sasr.
2. Derks, K. (2023). *Bayesian Benefits for Auditing: A Proposal to Innovate Audit Methodology*. Nyenrode Business University. Freely available via https://nyenrode.nl.
3. Derks, K., Hoenderdos, M., de Swart, J., and Wetzels, R. (2021). *Statistics for Business with Applications in R and RStudio*. Freely available from https://github.com/koenderks/sfb.

(g) Blog posts

1. Derks, K., and Mensink, L. (2024, 22nd November). Machine learning in de audit: stratificeren van bedrijfslocaties. *Accountant.nl*. https://www.accountant.nl/vaktechniek/2024/11/machine-learning-in-de-audit-stratificeren-van-bedrijfslocaties/
2. Derks, K. (2024, 21st June). Machine learning in de audit: uitschieters bij vastgoedwaardering. *Accountant.nl*. https://www.accountant.nl/vaktechniek/2024/6/machine-learning-in-de-audit-uitschieters-bij-vastgoedwaardering/

3. Derks, K. (2024, 1th May). Machine learning in de audit: voorspellen van klantverloop. *Accountant.nl*. https://www.accountant.nl/vaktechniek/2024/5/machine-learning-in-de-audit-voorspellen-van-klantverloop/
4. van Leeuwen, N. and Derks, K. (2023, 15th November). De steekproef ontmaskerd - Deel 5. *Accountant.nl*. https://www.accountant.nl/vaktechniek/2023/11/de-steekproefomvang-ontmaskerd—deel-5/
5. Derks, K. and Ly, A. (2022, 6th April). How to Predict with Machine Learning Models in JASP: Classification. *JASP blog*. https://jasp-stats.org/2022/04/26/how-to-predict-with-machine-learning-models-in-jasp-classification/
6. Derks, K. and Ly, A. (2021, 11th November). Benford's Law: Using JASP to Test Whether a Data Set Occurred Naturally. *JASP blog*. https://jasp-stats.org/2021/11/30/benfords-law-jasp/
7. Derks, K. and Ly, A. (2019, 07th October). How to train a machine learning model in JASP: Classification. *JASP blog*. https://jasp-stats.org/2019/10/07/how-to-train-a-machine-learning-model-in-jasp-classification
8. Derks, K. and Ly, A. (2019, 24th September). Introducing JASP 0.11: The machine learning module. *JASP blog*. https://jasp-stats.org/2019/09/24/introducing-jasp-0-11-the-machine-learning-module/
9. Derks, K. (2019, 24th April). 7 Easy steps to building your own shiny app from scratch. *JEPS bulletin*. https://blog.efpsa.org/2019/04/24/7-easy-steps-to-building-your-own-shiny-app-from-scratch

(h) Awards

2024 'Probability' Ig Nobel Prize	Annals of Improbable Research
1st Prize Poster Award	Research Master Graduate Conference 2017
Kluitersprijs	Ad de Jonge Centrum voor Inlichtingen en Veiligheidsstudies

(i) Committee Work

1. December 2020 - Present: Member of the Exam Committee Accounting, Controlling & Tax at Nyenrode Business University.
2. August 2019 - Present: Member of the Steering Committee Statistical Auditing at the Limperg Instituut.
3. February 2020 - Present: Member of committee 400069 (Toepassing statistische methoden) at Stichting Koninklijk Nederlands Normalisatie Instituut (NEN).