

## prof. dr. M. C. Kaptein

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CONTACT INFORMATION	Maurits Clemens Kaptein Scientist & Entrepreneur Archipelstraat 13 6524 LK Nijmegen, the Netherlands	+31-06 21262211 <a href="mailto:maurits@mauritskaptein.com">maurits@mauritskaptein.com</a> <a href="http://www.mauritskaptein.com">www.mauritskaptein.com</a> <a href="http://www.nth-iteration.com">www.nth-iteration.com</a>
SHORT SUMMARY	<i>I am scientist and entrepreneur. My scientific work focusses on statistical methods for personalization (in e.g., healthcare and marketing), machine learning, and data science. I have successfully founded, grown, and sold companies, and I have attracted over 3.5 Million in funding. I have developed several popular software packages. I am the author of 3 books, and over 60 scientific publications. I am an active public speaker and I surf.</i>	
ACADEMIC APPOINTMENTS	<b>Professor Data Science &amp; Health</b> Tilburg University, Tilburg, the Netherlands.	<b>August 2017 to present</b>
	<b>Principal Investigator</b> Jheronimus Academy of Data Science, Den Bosch, the Netherlands Group lead of the Computational Personalization research group (8 PhDs, 1 PostDoc).	<b>August 2016 to present</b>
	<b>Assistant Professor (Tenured)</b> Statistics and Research Methods, Tilburg University, Tilburg, the Netherlands.	<b>February 2016 to August 2016</b>
	<b>Assistant Professor</b> Artificial Intelligence, Radboud University, Nijmegen, the Netherlands.	<b>August 2014 to January 2016</b>
	<b>Assistant Professor</b> Statistics and Research Methods, Tilburg University, Tilburg, the Netherlands.	<b>September 2012 to August 2014</b>
	<b>Postdoctoral Researcher</b> Aalto School of Economics, Marketing Department, Helsinki, Finland.	<b>September 2011 to December 2012</b>
	<b>Distinguished MediaX Visiting Scholar</b> Stanford University, Department of Communication, Stanford, CA, USA.	<b>2009-2011, 4-5 months a year</b>
	<b>PhD Student</b> Department of Industrial Design, Eindhoven University of Technology.	<b>September 2008 to March 2012</b>
PROFESSIONAL EXPERIENCE & APPOINTMENTS	<b>Advisor to the board / scientific advisor</b> Over the last 5 years I have held several appointments in various advisory boards: <ul style="list-style-type: none"><li>- <b>De Verhalenmarkt b.v.</b> <a href="https://www.verhalenmarkt.nl">https://www.verhalenmarkt.nl</a> Scientific advisor + hiring tech team. Secured &gt; 1 million funding.</li><li>- <b>Xomnia b.v.</b> <a href="https://www.xomnia.com">https://www.xomnia.com</a> Advisor to the board.</li><li>- <b>Conversionmob b.v. / Gradient</b> <a href="https://begradiant.com">https://begradiant.com</a> Scientific advisor &amp; advisor to the board.</li></ul> <b>Waalhalla Centrum</b> , Nijmegen, the Netherlands <i>Chairman of the board</i> October 2010 to August 2017 Skateboard / youth center in Nijmegen. Grew from scratch to over 1 Million yearly revenue (2018) and 8 FTE.	
	<b>PersuasionAPI / Science Rockstars</b> , Amsterdam, the Netherlands <i>Founder, Owner, and Chief Scientist</i> October 2011 to December 2015 Startup based on my PhD. work. Clients (e.g.): UPC, Booking.com, Rovio, KLM. Company sold in November 2014.	

	<b>Philips Research</b> , Eindhoven, the Netherlands <i>Research Scientist</i>	September 2008 to August 2012
	<b>De Vos en Jansen Marktonderzoek</b> , Nijmegen, the Netherlands <i>Research Development Manager</i>	September 2007 to September 2008
	<b>Vodafone Group R&amp;D</b> , Maastricht, the Netherlands <i>Customer Insight Specialist</i>	January 2007 to September 2007
EDUCATION	<b>Eindhoven University of Technology</b> , Eindhoven, the Netherlands PhD., Industrial Design, March 2012 ( <i>cum laude</i> ). PdEng., User System Interaction, September 2007.  <b>University of Tilburg</b> , Tilburg, the Netherlands MS., Economic Psychology, June 2005. BS., Economic Psychology, August 2004.	
PUBLIC SPEAKING	For info and bookings please contact <a href="#">The Next Speaker</a> .	
BOOKS	[1] Kaptein, M.C. & van den Heuvel, E. (2019, upcoming) <i>Statistics for Data Scientists</i> . Springer, Berlin-Heidelberg.  [2] Kaptein, M.C. (2019) <i>Hallo Wereld, Hallo Computer</i> . Business Contact, Amsterdam.  [3] Kaptein, M.C. & Robertson, J. (2016) <i>Modern Statistical Methods for Human Computer Interaction</i> . Springer, Berlin-Heidelberg.  [4] Kaptein, M.C. (2012). <i>Persuasion Profiling: How the internet knows what makes you tick..</i> Business Contact, Amsterdam, the Netherlands.	
ACADEMIC TRACK RECORD	<i>I have an interdisciplinary scientific track record and I have published in influential journals in the fields of statistical science, communication, marketing, computer science, and human-computer interaction (HCI). My h-index is 18 and I have over 1350 citations. In total I have published 32 journal articles (20 as a first author and 4 as the sole author), 38 peer reviewed conference papers, 3 books, and 1 patent. I have supervised 20+ MSc. students, and 9 PhD students. I have taught courses on Statistics, Artificial Intelligence, Computation and Consumer Behavior. I have won several awards for my scientific work, and secured close to 2 million in funding.</i>	
SOFTWARE DEVELOPMENT	ssev author of a [R] package for computing sample sizes for finite populations. contextual co-author of an [R] package for offline bandit evaluation. StreamingBandit co-author of a Python REST server for bandit policies. oFMLR author of an [R] package to estimate online finite mixtures of logistic regression models. RStorm author of an [R] package for the development of online algorithms based on the design of Storm. 2013. nParLD Provided an online interface to the [R] package for CHI 2011.	
MORE INFORMATION	For more information / references please contact prof. dr. Maurits Kaptein e-mail: <a href="mailto:maurits@mauritskaptein.com">maurits@mauritskaptein.com</a> phone: +31-6 21262211)	
APPENDIX	Overview of scientific publications, teaching, and supervision.	

- [5] Eckles, D. & Kaptein, M.C. (2018) Bootstrap Thompson Sampling and Sequential Decision Problems in the Behavioral Sciences. Accepted at *SAGE Open*.
- [6] Kaptein, M.C. (2019) A practical approach to sample size calculation for fixed populations. Accepted at *Contemporary Clinical Trials*.
- [7] Ippel, L., Kaptein, M.C., & Vermunt, J. (2019) Online Estimation of Individual-Level Effects using Streaming Shrinkage Factors. Accepted at *Computational Statistics and Data Analysis*.
- [8] Kruijswijk, J., van Emden, R., Parvinen, P. & Kaptein, M.C. (2019) StreamingBandit; Experimenting with Bandit Policies. Accepted at *The Journal of Statistics Software*.
- [9] Kaptein, M.C. (2019) Personalization in biomedical-informatics: Methodological considerations and recommendations. *Journal of biomedical informatics*, 90, 103088.
- [10] Ippel, L., Kaptein, M.C., & Vermunt, J. (2019) Estimating Multilevel Models on Data Streams L Ippel, MC Kaptein, *Psychometrika*, 1-24.
- [11] Streitz, N., Charitos, D., Kaptein, M.C. & Bhlen, M. (2019) Grand challenges for ambient intelligence and implications for design contexts and smart societies. *Journal of Ambient Intelligence and Smart Environments*, 11(1), 87-107.
- [12] Eckles, D. & Kaptein, M.C. (2018) Response to: Optimal treatment allocations in space and time for on?line control of an emerging infectious disease, *Journal of the Royal Statistical Society: Series C*, 67 (4), 777-778.
- [13] Kaptein, M.C., McFarland, R., & Parvinen, P. (2018) Automated Adaptive Selling, *European Journal of Marketing*, 52 (5/6), 1037-1059.
- [14] Kaptein, M.C. (2018) Customizing Persuasive Messages; the Value of Operative Measures, *Journal of Consumer Marketing*, 35, 2.
- [15] Kaptein, M.C., Van Emden, R. & Iannuzzi, D. (2017) Uncovering noisy social signals: using optimization methods from experimental physics to study social phenomena. *Plos ONE*
- [16] Ippel, L., Kaptein, M.C. ,& Vermunt, J. (2017) Dealing with data streams: an online, row-by-row, estimation tutorial. *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences*.
- [17] Kaptein, M. C., Van Emden, R. & Iannuzzi, D. (2016) Tracking the decoy: Maximizing the decoy effect through sequential experimentation. *Palgrave Communications*, 2, Online first.
- [18] Mohammadi, A. & Kaptein, M.C. (2016) Efficient metropolis-hastings proposal mechanisms for bayesian regression tree models comment. *Bayesian Analysis*, 11, 3, 938–940.
- [19] Ippel, L., Kaptein, M.C. & Vermunt, J. (2016) Estimating random-intercept models on data streams. *Computational Statistics & Data Analysis*, 104, 169–182.
- [20] Kaptein, M.C., Parvinen, P. & Poyry, E. (2015) The Danger of Engagement: Behavioral Observations of Online Community Activity and Service Spending in the Online Gaming Context. *International Journal of Electronic Commerce*.
- [21] Kaptein, M.C., Markopoulos, P., de Ruyter, B. & Aarts, E. (2015). Personalizing Persuasive Technologies: Explicit and Implicit Personalization using Persuasion Profiles. *International Journal of Human Computer Studies*, 77, 38-51.
- [22] Vidotto, D., Vermunt, J. & Kaptein, M.C. (2015) Multiple Imputation of Missing Categorical Data using Latent Class Models: State of Art. *Psychological Test and Assessment Modeling*.
- [23] Kaptein, M.C. & Parvinen, P. (2014) Advancing E-Commerce Personalization: A Process Framework and Case Study. *International Journal of Electronic Commerce*, 19(3), 7-33.
- [24] Parvinen, P., Oinas-Kukkonen, H. & Kaptein, M.C. (2014) E-selling: a new avenue of research for service design and online engagement. *Electronic Commerce, Research and Applications*, online first: <http://www.sciencedirect.com>.
- [25] Kaptein, M.C., Markopoulos, P. & Nass, C. (2014). The effects of familiarity and similarity on compliance in social networks, *International Journal of Internet Marketing and Advertising*, 8, 222-238.
- [26] Kaptein, M. C. (2014). The Use of Thompson Sampling to Increase Estimation Precision *Behavior Research Methods*, online first: <http://link.springer.com/article/10.3758/s13428-014-0480-0>.
- [27] Kaptein, M. C. (2014). RStorm: Developing and Testing Streaming Algorithms in R *R-Journal*, 6(1), 123-132.

- [28] Kaptein, M. C., Fernandez, N., Castaneda, D. & Nass, C. (2013). Extending the Similarity-Attraction Effect: The Effects of When-Similarity in Mediated Communication. *Journal of Computer-Mediated Communication*, 19(3), 342-357.
- [29] Kaptein, M. C. & van Halteren, A. (2013). Adaptive Persuasive Messaging to Increase Service Retention. *Journal of Personal and Ubiquitous Computing*, 17(6), 1173-1185.
- [30] Kaptein, M. C. & Duplinsky, S. (2012). Combining Multiple Influence Strategies to Increase Consumer Compliance. *International Journal of Internet Marketing and Advertising*. 8(1), 32-53.
- [31] Kaptein, M. C. & Eckles, D. (2012). Heterogeneity in the Effects of Online Persuasion. *Journal of Interactive Marketing*, 26(3), 176-188.
- [32] Kaptein, M. C., de Ruyter, B., Markopoulos, P. & Aarts, E. (2012). Tailored Persuasive Text Messages to Reduce Snacking. *Transactions on Interactive Intelligent Systems*, 2(2), 45-63.
- [33] Kaptein, M. C., Eckles, D. & Davis, J. (2011). Envisioning Persuasion Profiles: Challenges for Public Policy and Ethical Practice. *ACM Interactions*, 18(5), 66-69.
- [34] Kaptein, M. C., Markopoulos, P., Ruyter, B. & Aarts, E. (2010). Two acts of social intelligence: the effects of mimicry and social praise on the evaluation of an artificial agent. *AI & SOCIETY*, 26(3), 261-273.
- [35] Kaptein, M. C., Markopoulos, P., Ruyter, B. & Aarts, E. (2009). Persuasion in ambient intelligence. *Journal of Ambient Intelligence and Humanized Computing*, 1(1), 43-56.
- [36] Kaptein, M. C., Weisscher, A., Terken, J. M. B. & Nelissen, H. (2009). Online contextmapping; using the opportunities of Web 2.0 for the contextmapping procedure. *CoDesign*, 5(4), 213-228.
- [37] Parvinen, P., Kaptein, M.C., Pyry, E. & Hamari, J. (2017). Introduction to Customer Analytics and Data-Led Omnichannel Commerce Minitrack. In *Proceedings of the 50th Annual Hawaii International Conference on System Sciences (HICSS)*, Hawaii, USA.
- [38] Pyry, E., Hietaniemi, N., Parvinen, P., Hamari, J. & Kaptein, M.C. (2017). Personalized Product Recommendations: Evidence from the Field. In *Proceedings of the 50th Annual Hawaii International Conference on System Sciences (HICSS)*, Hawaii, USA, January 4-7. Best paper nominee.
- [39] Kaptein, M.C., van Emden, D. & Iannuzzi, D. (2017). Lock-in and Human Behavior: Experimental Physics for the Social Sciences. In *Proceedings of Physics at Veldhoven*, poster presentation.
- [40] Kaptein, M.C. (2016) Using generalized linear (mixed) models in hci. In *Modern Statistical Methods for HCI*. Springer International Publishing, pp. 251274.
- [41] Robertson, J. & Kaptein, M.C. (2016) Improving statistical practice in hci. In *Modern Statistical Methods for HCI*. Springer International Publishing, pp. 331348.
- [42] Robertson, J. & Kaptein, M.C. (2016) An introduction to modern statistical methods in hci. In *Modern Statistical Methods for HCI*. Springer International Publishing, pp. 114.
- [43] Kaptein, M.C. & Kruijswijk, J. (2016) Streamingbandit: A platform for developing adaptive persuasive systems. In *Proceedings of the International Workshop on Personalization in Persuasive Technology (PPT16)*, Salzburg, Austria.
- [44] Berkovsky, S., Kaptein, M.C. & Zancanaro, M. (2016) Adaptivity and personalization in persuasive technologies. In *Proceedings of the International Workshop on Personalization in Persuasive Technology (PPT16)*, Salzburg, Austria.
- [45] Kaptein, M.C. (2016) Treatment Personalization using Bayesian Decision Theory. Poster presented at *the International Society of Bayesian Analysis 2016*.
- [46] Kaptein, M.C. & Kruijswijk, J. (2016) StreamingBandit: A platform for developing adaptive persuasive systems. Poster presented at *Persuasive 2016*.
- [47] Siebeling, J, van der Putten P & Kaptein, M.C. (2016) Do Warriors, Villagers, and Scientists Decide Differently? The Impact of Role on Message Framing. In *Proceedings of INTETAIN 2016*. (best paper award)
- [48] Kaptein, M.C. & Iannuzzi, D. (2015) Lock in Feedback for stochastic optimization. In *proceedings of Benelearn 2015*.
- [49] Kaptein, M.C. (2015) Formalizing Customization in Persuasive Technologies. In *proceedings of Persuasive 2015*.
- [50] Kaptein, M.C. & Parvinen, P. (2014), Real-Time Adaptation of Influence Strategies in Online Selling. *proceedings of the 2014 47th Hawaii International Conference on System Sciences (HICSS)* pp.3100-3109

- [51] Kaptein, M.C. (2013). Latent Class Models in Marketing: Trading off Classification Certainty and Costs of Data Collection. *Abstract accepted at IFCS 2013*.
- [52] Parvinen, P. & Kaptein, M.C. (2013). Theory vs. Data-Driven Learning in Future E-Commerce *In the proceedings of HICSS 2013*.
- [53] Kaptein, M.C., Nass, C., Parvinen, P. & Markopoulos, P. (2013). Nice to Know You: Familiarity and Influence in Social Networks. *In the proceedings of HICSS 2013*.
- [54] Kaptein, M.C. & Parvinen, P. (2012). Dynamically Adapting Sales Influence Tactics in E-Commerce. *Proceedings of the 2012 Academy of Marketing Science Annual Conference*.
- [55] Kaptein, M.C. & Parvinen, P. (2012). Sequential Learning of Optimal Sales Prices. *Proceedings of the 2012 Academy of Marketing Science Annual Conference*.
- [56] Lindholm, J., Kaptein, M.C. & Parvinen, P. (2012). The Price of Customer Engagement: How Substitution in Online Services Leads to Decreasing Revenues *Proceedings of the 2012 Academy of Marketing Science Annual Conference*.
- [57] Kaptein, M. C. & Robertson, J. (2012). Rethinking Statistical Methods for HCI. In *Proceedings of the 2011 annual conference on Human factors in computing systems, CHI 2012*.
- [58] Zwinderman, M.J., Shirzad, A., Ma, X., Bajracharya, P., Sandberg, H. & Kaptein, M.C. (2012) Phone row: a smartphone game designed to persuade people to engage in moderate-intensity physical activity. in *Proceedings of the 7th international conference on Persuasive Technology*.
- [59] Sakai, R., Peteghem, S. van, Sande, L. van de, Banach, P. & Kaptein, M. C. (2011). Personalized Persuasion in Ambient Intelligence: the APStairs System. In *Proceedings of Ambient Intelligence (AmI) 2011*. Amsterdam.
- [60] Lindholm, J., Kaptein, M. C. & Parvinen, P. (2012). The Trade-off between Online Community Activity and Consumption. In *Proceedings of HICSS 2012*. Hawaii.
- [61] Kaptein, M. C. (2011). Adaptive Persuasive Messages in an E-commerce Setting: The use of Persuasion Profiles. In *Proceedings of ECIS 2011*. Helsinki.
- [62] Kaptein, M. C., & Eckles, D. (2011). Magnitude and Structure of Heterogeneity in the Effects of Influence Strategies. In *Proceedings of Persuasive Technology 2011*. Ohio.
- [63] Kaptein, M. C., Duplinsky, S. & Markopoulos, P. (2011). Means based adaptive persuasive systems. In *Proceedings of the 2011 annual conference on Human factors in computing systems (pp. 335-344)*. New York, NY, USA: ACM.
- [64] Kaptein, M. C., Lacroix, J. & Saini, P. (2010). Individual Differences in Persuadability in the Health Promotion Domain. In T. Ploug, P. Hasle, & H. Oinas-Kukkonen (Eds.), *Persuasive Technology (pp. 94-105)*. Springer Berlin / Heidelberg. (best paper award)
- [65] Kaptein, M. C. & Eckles, D. (2010). Selecting Effective Means to Any End: Futures and Ethics of Persuasion Profiling. In T. Ploug, P. Hasle, & H. Oinas-Kukkonen (Eds.), *Persuasive Technology (pp. 82-93)*. Springer Berlin / Heidelberg.
- [66] Scherini, T., Melo, P., van Craenendonck, T., Zou, W. & Kaptein, M. C. (2010). Enhancing the sleeping quality of partners living apart. In *Proceedings of the 8th ACM Conference on Designing Interactive Systems - DIS 2010 (pp. 171-179)*. New York, New York, USA: ACM Press.
- [67] Kaptein, M. C., Nass, C. & Markopoulos, P. (2010). Powerful and consistent analysis of likert-type ratingscales. In *Proceedings of the 28th international conference on Human factors in computing systems - CHI 2010 (pp. 2391-2401)*. New York, New York, USA: ACM Press.
- [68] Kaptein, M. C., de Ruyter, B., Markopoulos, P. & Aarts, E. H. L. (2009). Simple Ways to Make Friends. In *Proceedings of the 8th International Workshop on Social Intelligence*.
- [69] Kaptein, M. C., de Ruyter, B., Markopoulos, P. & Aarts, E. (2009). Measuring the Subjective User Experience. In *Proceedings of the 12th IFIP TC 13 International Conference - INTERACT (pp. 944-945)*.
- [70] Kaptein, M. C., de Ruyter, B., Markopoulos, P. & Aarts, E. (2009). Persuading you: Individual differences in susceptibility to persuasion. In *Proceedings of the 12th IFIP TC 13 International Conference - INTERACT (pp. 24-28)*. Uppsala, Sweden: ACM Press.
- [71] Soute, I., Kaptein, M. C. & Markopoulos, P. (2009). Evaluating outdoor play for children. In *Proceedings of the 8th International Conference on Interaction Design and Children - IDC 2009 (p. 250)*. New York, New York, USA: ACM Press.
- [72] Kaptein, M. C., Slegers, K., Nelissen, H., Weisscher, A. & Terken, J. M. B. (2007). The Digital Workbook: Using Web 2.0 for Generative Research Purposes. In *Proceedings of MobileHCI 2007*.

- [73] Al Mahmud, A., Kaptein, M. C., Moran, O., Van De Garde-Perik, E. & Markopoulos, P. (2007). Understanding Compliance to Privacy Guidelines Using Text-and Video-Based Scenarios. In *Proceedings of HumanComputer Interaction INTERACT 2007* (pp. 156-168). Springer Berlin / Heidelberg.
- [74] Romero, N., Szóstek, A. M., Kaptein, M. C. & Markopoulos, P. (2007). Behaviours and Preferences when Coordinating Mediated Interruptions : Social and System influence. In *Proceedings of CSCW 2007* (pp. 123-132). Kluwer Press.
- ARXIV SUBMISSIONS
- [75] Mohammadi, R., Pratola, M. & Kaptein, M.C. (2019) Continuous-Time Birth-Death MCMC for Bayesian Regression Tree Models.  
<https://arxiv.org/abs/1904.09339>
- [76] van Emden, R. & Kaptein, M.C. (2018) Contextual: Evaluating Contextual Multi-Armed Bandit Problems in R.  
<https://arxiv.org/abs/1811.01926>
- [77] Kaptein, M.C., & Ketelaar P. (2018) Maximum likelihood estimation of a finite mixture of logistic regression models in a continuous data stream.  
<http://arXiv:1802.10529>
- [78] Kaptein, M.C., van Emden, R., and Iannuzzi, D. (2016) Investigation of the concept of beauty via a lock-in feedback experiment.  
<http://arXiv:1607.08108>
- [79] Kaptein, M.C. & Kruijswijk, J. (2016). StreamingBandit: Developing Adaptive Persuasive Systems.  
<http://arxiv.org/abs/1602.06700.pdf>
- [80] Kaptein, M.C. & Iannuzzi, D. (2015). Lock in Feedback in Sequential Experiments.  
<http://arxiv.org/pdf/1502.00598.pdf>
- [81] Eckles, D. & Kaptein, M.C. (2014). Thompson Sampling with the Online Bootstrap.  
<http://arxiv.org/abs/1410.4009>
- PATENTS
- [82] Van Halteren, A. T., Lacroix, J. P. W., Geleijnse, G., Pijl, M. J., Saini, P. K., Kaptein, M.C., Ferron, J.L.G. & Holmes, R. (2013). Coaching system that builds coaching messages for physical activity promotion. U.S. Patent Application 14/056,152.
- BOOKS
- [83] Kaptein, M.C. & van den Heuvel, E. (2019) *Statistics for Data Scientists*. Springer, Berlin-Heidelberg. UPCOMING 2019.
- [84] Kaptein, M.C. (2019) *Hallo Wereld, Hallo Computer*. Business Contact, Amsterdam.
- [85] Kaptein, M.C. & Robertson, J. (2016) *Modern Statistical Methods for Human Computer Interaction*. Springer, Berlin-Heidelberg.
- [86] Kaptein, M.C. (2012). *Digitale Verleiding: Hoe beïnvloedingsprofielen de online marketing op z'n kop zetten*. Business Contact, Amsterdam, the Netherlands.
- UNDER REVIEW
- [87] Chen, H. & Kaptein, M.C. (2019) Estimating causal effects from observational data via a Bayesian approach. Submitted to *European Conference on Machine Learning (ECML)*.
- [88] Parvin, P., Kaptein, M.C., & Paterno, F. (2019) Personalized Real-time Anomaly Detection and Health Feedback for Older Adults Submitted to: *Journal of Ambient Intelligence and Smart Environments*.
- [89] van Emden, R. & Kaptein, M.C. (2019) Contextual: Evaluating Contextual Multi-Armed Bandit Problems in R. Submitted to: *Journal of Machine Learning Research*.
- [90] Kruijswijk, J., Boeing-Messing, F., van Emden, R. & Kaptein, M.C. (2019) Bandits with Dependent Observations. Submitted to: *Computational Statistics and Data Analysis*.
- [91] van der Burg, J., Aziz, A., Kaptein, M.C., Breteler, M., Jansen, J., van Vliet, L., Winkeler, D., van Anken, A., Kasteleyn, & M. Chavannes, N. (2019) Long-term Effects of Telemonitoring on Healthcare Usage in Patients with Heart Failure and COPD. Submitted to: *Journal of Medical Internet Research*.
- [92] Kaptein, M.C. (2019) A practical approach to sample size calculation for fixed populations. Submitted to: *Contemporary Clinical Trials*.
- OTHER PUBLICATIONS
- [93] Kaptein, M.C. (2018). *Computational Personalization; Data science methods for personalized health*. Inaugural address at the University of Tilburg.
- [94] Kaptein, M.C. (2012). *Personalized Persuasion in Ambient Intelligence*. PhD. thesis at the Eindhoven University of Technology.
- [95] Kaptein, M.C. (2007). *The Digital Workbook: Methods and Applications of Online Contextmapping*. PdEng. thesis at the Eindhoven University of Technology
- [96] Kaptein, M.C. (2005). *An Exploration of Fad Products and Explanations for their Unusually high Adoption Rates*. Master Thesis at the University of Tilburg.

MEDIA  
APPEARANCES

- Various articles reviewing my book “Hallo Wereld, Hallo Computer” (2019). (e.g., [link](#))
- Various articles based on my inaugural address (2018) (e.g., [link](#))
- Professional speaker on Data Science / Machine learning for “The Next Speaker” (2015-now)
- Speaker for “De Universiteit van Nederland” (2015) ([link](#)), public lecture broadcasted on national television.
- Personalized Persuasion (Volkskrant – 2014) ([link](#))
- Persuasion profiling (Wired – 2011) ([link](#))
- Interview Persuasion Profiling (Blink – 2012) ([link](#))
- Interview on “Digitale Verleiding” (Managementboek – 2012) ([link](#))

GRANTS

- **UNDER REVIEW: NWO Zwaartekracht**  
Co-application in grant application “Fairness in the Data Society.”  
Currently in second round (interviews).
- **GRANTED: TiU UniversiteitsFonds**  
Grant to support a Post doc project in joint supervision with Prof. Dr. Inge Bongers: “Artificile intelligentie in Serious gaming ter verbetering van zelfbewustzijn bij chronische lage rugpijn.”  
By the University of Tilburg, 2018 (300k).
- **GRANTED: NWO Research Talent**  
Grant to support a PhD project in joint supervision with dr. Joris Mulder: “Making the most of clinical trials: Increasing efficiency using novel Bayesian methods for information sharing within and between trials.”  
By the NWO, 2018 (300k).
- **GRANTED: TiU Data Science PhD grant**  
Grant to support a PhD project in joint supervision with dr. Aurelie Lemmens: “Churn and sequential decision making.”  
By the University of Tilburg, 2017 (300k).
- **GRANTED: ERC writing grant**  
Grant to support writing ERC starting grant application  
By the University of Tilburg, 2016 (15k).
- **GRANTED: FOM Valorisation grant**  
Grant for work on Lock-in Amplification.  
PI: Prof. Dr. Davide Iannuzzi (VU, Amsterdam). July 2015 (40k).
- **GRANTED: Donders Centre for Cognition Student Assistant Grant**  
Grant for a student assistant for software development. November 2014 (5k).
- **GRANTED: K2, Tekes Strategic Research initiative**  
(PI: Petri Parvinen)  
Contributed to writing the proposal. Proposal funded my Post Doc position (487k).
- **GRANTED: Aalto visiting Scholar Travel Grant**  
“Excellent visitors grant”, February 2012.  
Visit to Aalto University school of Economics to lecture on the topic of persuasion profiling (25k).
- **GRANTED: Philips / Stanford Media X scholarship grant**  
Partly funded my PhD project  
Awarded by Philips research 2009 (100k).

TEACHING EXPERIENCE

- **Modeling** September 2018 to current  
**Role:** Responsible lecturer.  
**Course content:** Statistical methods, modeling, inference.  
**Location:** JADS Den Bosch.  
**Additional comments:** *I developed this course from scratch for the pre-master program at JADS. I actively experimented with “flip-the-classroom” concept and I used video lectures.*
- **Data Mining** September 2016 to January 2017  
**Role:** (co-) Responsible lecturer.  
**Course content:** Data mining & machine learning methods.  
**Location:** Tilburg University & Eindhoven University of Technology.  
**Additional comments:** *Together with Joaquin Verschoren I developed this Bachelor course from scratch. The course was well-evaluated, and we received an “outstanding teacher” award.*
- **Data Challenge** September 2016 to January 2017  
**Role:** (co-) Responsible lecturer.  
**Course content:** Interactive course for mining Twitter data.  
**Location:** Tilburg University & Eindhoven University of Technology.  
**Additional comments:** *This innovative, group-work, course was developed from scratch by Dirk Fahland and myself for the Bachelor Data Science. The course was well-evaluated, and we received an “outstanding teacher” award.*

- Data Statistics**  
**Role:** (co-) Responsible lecturer.  
**Course content:** Statistics and modeling introduction.  
**Location:** Tilburg University & Eindhoven University of Technology.  
**Additional comments:** *I developed this course from scratch together with Edwin van den Heuvel for the Bachelor Data Science. The lecture notes will be published as a book ("Statistics for Data Scientists") by Springer in 2019.*

September 2016 to current
- AI at a Webscale**  
**Role:** Responsible lecturer  
**Course content:** Machine learning methods, Reinforcement learning, dealing with large datasets.  
**Location:** Radboud University, Nijmegen.  
**Additional comments:** *I developed this Master-level course from scratch. The course was very well evaluated: 8.5 out of 10.*

August 2014 to February 2016
- Multi-level models for categorical data**  
**Role:** Responsible lecturer  
**Course content:** Multi-level modeling.  
**Location:** Tilburg University.  
**Additional comments:** *This Research Master-level course was an intense, 8 week, course with a small group of students and was well-evaluated.*

September 2012 to August 2014
- Analysis and Construction of Questionnaires**  
**Role:** Responsible lecturer  
**Course content:** Questionnaire design and analysis.  
**Location:** Tilburg University.  
**Additional comments:** *I taught this Bachelor level course to over 300 students. The course was well-evaluated (4.3 out of 5), and served to obtain my BKO.*

September 2012 to August 2014
- Persuasive Technology**  
**Role:** Responsible lecturer  
**Course content:** Persuasive technology and UX design  
**Location:** Eindhoven University of Technology.  
**Additional comments:** *This week long, intensive course (full-time) ran several years within the PdEng. program User-System Interaction.*

August 2011 to September 2016
- Sales Management**  
**Role:** Lecturer / instructor  
**Course content:** Sales management and online selling  
**Location:** Aalto school of economics, Helsinki, Finland.

From October 2011 to April 2013
- Quantitative Analysis Methods**  
**Role:** Responsible lecturer  
**Course content:** Data analysis and applied usage of SPSS  
**Location:** Eindhoven University of Technology.  
**Additional comments:** *This course was part of the PdEng. program User-System Interaction.*

April 2007 to August 2010
- Statistics and Research Methods (various)**  
**Role:** Student assistant / TA  
**Course content:** Various statistical methods courses.  
**Location:** Tilburg University.

August 2003 to August 2005

PHD STUDENT  
SUPERVISION

- Hongyi Chen MSc.**  
 Ph.D. Student on Bayesian model averaging for causal inference. JADS Ph.D. Defense planned September 2023.  
*Hongyi has successfully submitted one workshop abstract and is currently nearing the completion of his first manuscript.*
- Lingjie Shen MSc.**  
 Ph.D. Student on personalized treatment allocation in oncology. CSC grant. Defense planned September 2023.  
*Lingjie actively collaborates with IKNL and is nearing the completion of her first manuscript.*
- Xynthia Kavelaars MSc.,**  
 Ph.D Student on Bayesian adaptive trials. NWO Talent Grant. Defense planned September 2023.  
*Xynthia currently has finished her first manuscript on Bayesian adaptive trials with multiple outcome measures.*
- Zoltan Puha MSc.,**  
 Ph.D. Student churn prediction and sequential learning. TiU DSc/t grant. Defense planned September 2023.  
*Zoltan has successfully submitted abstracts to two conferences and has a working paper on active experimentation for churn management.*



**Bas Willemsse MSc.,**

Ph.D. Student eHealth effectiveness and personalization. CZ funding. Preliminary thesis title: “*The health telescope: data science methods for studying e-Health effectiveness*”. In progress. Defense planned September 2022.

*Bas has completed his first manuscript describing the protocol of the health-telescope and has obtained ERB approval for this large panel study.*

**Ylva Hendriks MSc.,**

Ph.D. Student eHealth adoption. TiU IMPACT grant. Preliminary thesis title: “*e-Health adoption and personalization*”. In progress. Defense planned September 2022.

*Ylva has conducted two empirical studies concerning the choice process of eHealth applications.*

**Robin van Emden MSc.,**

Ph.D. Student on bandit algorithms. JADS Ph.D. Defense planned September 2022.

*Robin is a part-time PhD student but has already submitted work to the journal of machine learning research and is nearing the completion of a manuscript for BMJ.*

**Jules Kruijswijk MSc.,**

Ph.D. Student Sequential decision making. TiU Ph.D. Preliminary thesis title: “*Hierarchical, dependent, and nested bandit problems*”. Defense planned September 2020.

*Jules has published one paper in the Journal of Statistical Software, and currently has two manuscripts ready for submission.*

**Lianne Ippel MSc.,**

Ph.D. Student Research Methods and Statistics. TiU Ph.D. Thesis “*Online Estimation of Treatment Heterogeneity*”. Graduated September 2017.

*Lianne successfully defended her Ph.D. and published four articles based on her dissertation in various, high-impact journals (e.g., Psychometrika, Computational Statistics and Data Analysis).*