#### Dr. M. C. Kaptein

Maurits Clemens Kaptein, PhD. Mobile: +31-06 21262211 CONTACT

Assistant Professor & Principal Investigator E-mail: INFORMATION

Archipelstraat 13 maurits@mauritskaptein.com 6524 LK Nijmegen WWW: www.mauritskaptein.com WWW2: www.nth-iteration.com the Netherlands

RESEARCH INTERESTS Research Methods, Treatment Personalization & Persuasion Profiles

Statistics & Research Methods, Online learning, Bandit problems,

Persuasion, Influence, Communication, Persuasion Profiles, Persuasive Technologies,

Marketing, Consumer Behavior, e-selling.

ACADEMIC APPOINTMENTS

#### Professor "Data Science & Health"

August 2017 to present

Jheronemous Academy of Data Science, Den Bosch, the Netherlands

- Professor by Special Appointment; Computational Personalization.
- Chair funded by CZ Health Insurance.

#### **Principal Investigator**

August 2016 to present

Jheronemous Academy of Data Science, Den Bosch, the Netherlands

- Joint research institute founded by Tilburg University and the Technical University of Eindhoven, the Netherlands.
- Principal Investigator; group lead of the "Data and Humans" research group.

#### **Assistant Professor (Tenured)**

February 2016 to present

Statistics and Research Methods, Tilburg University, Tilburg, the Netherlands.

- Supervision of lab consisting of 2 PhD Students and (currently) 3 MSc. students.
- See www.nth-iteration.com for lab website.

#### **Assistant Professor**

August 2014 to January 2016

Artificial Intelligence, Radboud University, Nijmegen, the Netherlands. Donders Centre for Cognition.

- Track leader of the Web & Language Master Track.
- Development of new "AI at the Webscale" MSc. course.

#### **Assistant Professor**

#### September 2012 to August 2014

Statistics and Research Methods, Tilburg University, Tilburg, the Netherlands.

- Selected papers (selected):
  - Kaptein, M.C. (2014). The Use of Thompson Sampling to Increase Estimation Precision. Behavior Research Methods, 47(2), 409-423.
  - Kaptein, M.C. (2014). RStorm: Developing and Testing Streaming Algorithms in R. R-Journal, 6(1), 123-132.
- Responsible for Bachelor level course "Analysis and Construction of Questionnaires" (300+ Students), and Master level course "Multi-level models for categorical data".

#### Postdoctoral Researcher

#### September 2011 to December 2012

Aalto School of Economics, Marketing Department, Helsinki, Finland.

- Supervised by Prof. Petri Parvinen.
  - "Dynamic Optimization of Profit Maximizing Sales Prices", work on Bayesian sequential learning of profit maximizing sales prices.
  - "Adaptive e-selling", project focussing on the real-time adaptation of persuasive product advertisements online.

#### **Distinguished MediaX Visiting Scholar**

2009-2011, 4-5 months a year

Stanford University, Department of Communication, Stanford, CA, USA.

- Collaboration with Prof. Clifford Nass.
  - "Persuasion Profiling", several empirical studies on human responses to influence strategies and persuasive communication. Work on the concept of persuasion profiling.
  - "Similarity and Persuasion in Social Networks", research project on the effects
    of similarity and familiarity with nodes in ones social network on compliance to
    persuasive communication.

#### **PhD Student**

#### September 2008 to March 2012

Department of Industrial Design, Eindhoven University of Technology.

- Promotor: Prof. Emile Aarts.
- Co-promotors: Prof. Panos Markopoulos & Dr. Boris de Ruyter.
  - "Personalized Persuasion in Ambient Intelligence", PhD. thesis on on the effects of personalizing the choice of influence strategy in persuasive technologies. The project combines both experimental studies as well as several field deployments of a adaptive persuasive systems. Graduated with honors / cum laude.

#### **EDUCATION**

#### Stanford University, Stanford, CA, USA.

Coursework, September 2009 to April 2011.

• During my stay as a distinguished MediaX visiting scholar at Stanford University I have attended numerous graduate level methods and statistics courses (e.g.): *Bayesian Statistics, Time Series Analysis, Multi-level and Hierarchical Models*.

#### Eindhoven University of Technology, Eindhoven, the Netherlands

PhD., Industrial Design, March 2012 (with honors).

- Thesis Topic: "Personalized Persuasion in Ambient Intelligence".
- Promotor: Prof. Emile Aarts.
- Co-promotors: Prof. Panos Markopoulos & Dr. Boris de Ruyter
- Area of Study: Personalized persuasive communication.

PdEng., User System Interaction, September 2007.

- Thesis Topic: "The digital workbook: Methods and applications of online contextmapping".
- Adviser: Prof. Panos Markopoulos.
- Area of Study: Usage of the contextmapping procedure—a participatory design method—in online environments.

#### University of Tilburg, Tilburg, the Netherlands

MS., Economic Psychology, June 2005.

- Thesis Topic: "An Exploration of Fad Products and Explanations for their Unusually high Adoption Rates."
- Adviser: Prof. Fred van Raaij
- Area of Study: The emergence of Fads and Hypes. Quantitative analysis of factors relating to product adoption.

BS., Economic Psychology, August 2004.

- Adviser: Prof. Fred van Raaij
- Area of Study: Economic Psychology. General Psychology introduction, marketing communication, decision making.

REFEREED JOURNAL PUBLICATIONS

- [1] Kaptein, M.C., McFarland, R., & Parvinen, P. (2017) Automated Adaptive Selling, *European Journal of Marketing* (ACCEPTED).
- [2] Kaptein, M.C. (2017) Customizing Persuasive Messages; the Value of Operative Measures, *Journal of Consumer Marketing*, 35, 2 (IN PRESS).
- [3] 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*
- [4] 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*.
- [5] Kaptein, M. C., Van Emden, R. & Iannuzzi, D. (2016) Tracking the decoy: Maximizing the decoy effect through sequential experimentation. *Palgrave Communications*, 2, Online first.
- [6] Mohammadi, A. & Kaptein, M.C. (2016) Efficient metropolis-hastings proposal mechanisms for bayesian regression tree models comment. *Bayesian Analysis*, 11, 3, 938–940.
- [7] Ippel, L., Kaptein, M.C. & Vermunt, J. (2016) Estimating random-intercept models on data streams. *Computational Statistics & Data Analysis*, 104, 169–182.
- [8] 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*.
- [9] 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 Computes Studies*, 77, 38-51.
- [10] 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.
- [11] 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*.
- [12] 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.
- [13] 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.
- [14] 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.
- [15] Kaptein, M. C. (2014). RStorm: Developing and Testing Streaming Algorithms in R *R-Journal*, 6(1), 123-132.
- [16] 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.
- [17] Kaptein, M. C. & van Halteren, A. (2013). Adaptive Persuasive Messaging to Increase Service Retention. *Journal of Personal and Ubiquitous Computing*, 17(6), 1173-1185.

- [18] 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.
- [19] Kaptein, M. C. & Eckles, D. (2012). Heterogeneity in the Effects of Online Persuasion. *Journal of Interactive Marketing*, 26(3), 176-188.
- [20] 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.
- [21] Kaptein, M. C., Eckles, D. & Davis, J. (2011). Envisioning Persuasion Profiles: Challenges for Public Policy and Ethical Practice. *ACM Interactions*, 18(5), 66-69.
- [22] 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.
- [23] 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.
- [24] 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.

# CONFERENCE PUBLICATIONS & BOOK CHAPTERS

- [25] 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.
- [26] 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.
- [27] 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.
- [28] Kaptein, M.C. (2016) Using generalized linear (mixed) models in hci. In *Modern Statistical Methods for HCI*. Springer International Publishing, pp. 251274.
- [29] Robertson, J. & Kaptein, M.C. (2016) Improving statistical practice in hci. In *Modern Statistical Methods for HCI*. Springer International Publishing, pp. 331348.
- [30] 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.
- [31] 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.
- [32] 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.
- [33] Kaptein, M.C. (2016) Treatment Personalization using Bayesian Decision Theory. Poster presented at *the International Society of Bayesian Analysis* 2016.

- [34] Kaptein, M.C. & Kruijswijk, J. (2016) StreamingBandit: A platform for developing adaptive persuasive systems. Poster presented at *Persuasive 2016*.
- [35] 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)
- [36] Kaptein, M.C. & Iannuzzi, D. (2015) Lock in Feedback for stochastic optimization. In *proceedings of Benelearn 2015*.
- [37] Kaptein, M.C. (2015) Formalizing Customization in Persuasive Technologies. In *proceedings of Persuasive 2015*.
- [38] 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
- [39] Kaptein, M.C. (2013). Latent Class Models in Marketing: Trading off Classification Certainty and Costs of Data Collection. *Abstract accepted at IFCS 2013*.
- [40] Parvinen, P. & Kaptein, M.C. (2013). Theory vs. Data-Driven Learning in Future E-Commerce *In the proceedings of HICSS 2013*.
- [41] 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*.
- [42] Kaptein, M.C. & Parvinen, P. (2012). Dynamically Adapting Sales Influence Tactics in E-Commerce. *Proceedings of the 2012 Academy of Marketing Science Annual Conference*.
- [43] Kaptein, M.C. & Parvinen, P. (2012). Sequential Learning of Optimal Sales Prices. Proceedings of the 2012 Academy of Marketing Science Annual Conference.
- [44] 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*.
- [45] 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 212.*
- [46] 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*.
- [47] 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.
- [48] Lindholm, J., Kaptein, M. C. & Parvinen, P. (2012). The Trade-off between Online Community Activity and Consumption. In *Proceedings of HICSS 2012*. Hawaii.
- [49] Kaptein, M. C. (2011). Adaptive Persuasive Messages in an E-commerce Setting: The use of Persuasion Profiles. In *Proceedings of ECIS 2011*. Helsinki.
- [50] Kaptein, M. C., & Eckles, D. (2011). Magnitude and Structure of Heterogeneity in the Effects of Influence Strategies. In *Proceedings of Persuasive Technology 2011*. Ohio.
- [51] 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.

- [52] 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)
- [53] 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.
- [54] 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.
- [55] 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.
- [56] 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*.
- [57] 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).
- [58] 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.
- [59] Soute, I., Kaptein, M. C. & Markopoulos, P. (2009). Evaluating outdoor play for children. In In *Proceedings of the Proceedings of the 8th International Conference on Interaction Design and Children IDC 2009* (p. 250). New York, New York, USA: ACM Press.
- [60] 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 Mobile HCI* 2007.
- [61] 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.
- [62] 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
- [63] 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
- [64] Kaptein, M.C. & Kruijswijk, J. (2016). StreamingBandit: Developing Adaptive Persuasive Systems. http://arxiv.org/abs/1602.06700.pdf
- [65] Kaptein, M.C. & Iannuzzi, D. (2015). Lock in Feedback in Sequential Experiments. http://arxiv.org/pdf/1502.00598.pdf
- [66] Eckles, D. & Kaptein, M.C. (2014). Thompson Sampling with the Online Bootstrap. http://arxiv.org/abs/1410.4009

#### **PATENTS**

[67] 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

- [68] Kaptein, M.C. & Robertson, J. (2016) *Modern Statistical Methods for Human Computer Interaction*. Springer, Berlin-Heidelberg.
- [69] Kaptein, M.C. (Forthcoming) *Hello World*, *Hello Computer*. Business Contact, Amsterdam. Expected spring 2018.
- [70] Kaptein, M.C. (2012). *Digitale Verleiding: Hoe beinvloedingsprofielen de online marketing op z'n kop zetten*. Business Contact, Amsterdam, the Netherlands.
  - Dutch popular book about my Ph.D. work.
  - Currently in it's seventh print (over 10.000 copies sold).
  - English Translation "Persuasion Profiling" published in April 2015.

## OTHER PUBLICATIONS

- [71] Kaptein, M.C. (2018). Computational Personalization; Data science methods for personalized health. Inaugural address at the University of Tilburg.
- [72] Kaptein, M.C. (2012). *Personalized Persuasion in Ambient Intelligence*. PhD. thesis at the Eindhoven University of Technology.
- [73] Kaptein, M.C. (2007). *The Digital Workbook: Methods and Applications of Online Contextmapping*. PdEng. thesis at the Eindhoven University of Technology
- [74] 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

#### Featured in popular media (selected):

- 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

#### **ERC** writing grant

Grant to support writing ERC starting grant application By the University of Tilburg, 2016 (15k).

#### **FOM Valorisation grant**

Grant for work on Lock-in Amplification.

PI: Prof. Dr. Davide Iannuzzi (VU, Amsterdam). July 2015 (40k).

#### **Donders Centre for Cognition Student Assistant Grant**

Grant for a student assistant for software development. November 2014 (5k).

#### K2, Tekes Strategic Research initiative

(PI: Petri Parvinen)

Contributed to writing the proposal. Proposal funded my Post Doc position (487k).

#### **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).

#### Philips / Stanford Media X scholarship grant

Partly funded my PhD project

Awarded by Philips research 2009 (100k).

TEACHING EXPERIENCE (SELECTED)

#### Tilburg University, Tilburg, the Netherlands.

#### Lecturer

#### September 2016 to Current

- Lecturer for the courses "Data statistics' and "Data mining".
  - Introductory courses on statistics, (Bayesian) methods, and data mining.
  - Not yet evaluated.

#### Radboud University, Nijmegen, the Netherlands.

#### Lecturer

#### August 2014 to February 2016

- Lecturer and coordinator for the Master course "AI at a Webscale".
  - Lectures on Online Classification, Recommender Systems, Online Learning, etc.
    - Part of 2 year master Artificial Intelligence program (30+ students).
    - Fully responsible for the development of the course. Evaluated 8.5 out of 10.

#### Tilburg University, Tilburg, the Netherlands.

#### Lecturer

#### September 2012 to August 2014

- Lecturer for the courses "Multi-level models for categorical data" and "Analysis and Construction of Questionnaires".
  - Lectures on the use of hierarchical models, cluster analysis & factor analysis.
  - Teaching both Bachelor (350+) and Master level students.
  - Average student evaluation 4.3 out of 5.
  - Obtained Teaching Certificate (BKO)

#### Eindhoven University of Technology, Eindhoven, the Netherlands

#### Lecturer

#### August 2011 to September 2016

- Instructor for "Persuasive Technology"
  - Full week course for post master program User System Interaction.
  - Lectures and assignments on the topic of Persuasive Technology.

#### Aalto School of Economics, Helsinki, Finland.

#### Lecturer

#### From October 2011 to April 2013

- Instructor for 23E52000: Sales Management.
  - Lectures on e-selling and the use of persuasion in e-commerce.
  - Student essay assignment on the differences between face-to-face persuasionand human-computer persuasion.

#### STUDENT ADVISING (SELECTION)

#### Jules Kruijswijk MSc.,

Ph.D. Student Sequential decision making. Preliminary thesis title: "Hierarchical, dependent, and nested bandit problems". In progress. Defense planned September 2020.

#### Lianne Ippel MSc.,

Ph.D. Student Research Methods and Statistics. Supervision of Ph.D. Thesis "Online Estimation of Treatment Heterogeneity". In progress. (Tilburg University). Defense planned September 2017.

#### Jasper van Whaa,

Master Student Artificial Intelligence "Interactive Reinforcement Learning". Graduated cum-laude. (Radboud Universiteit Nijmegen)

#### Vladimir Orekov,

Master Student Computer Science "Extensions of the PersuasionAPI algorithm". Graduated (8/10). (Eindhoven University of Technology)

#### Tess Speelpenning,

Master Student Human Technology Interaction. Supervision of Master Thesis project "Your menu Choice: Exploring how tailored persuasive messaging influences the healthiness of menu choices". Graduated cum-laude. (Eindhoven University of Technology)

#### Deonne Casteneda,

Bachelor Student Computer Science and Engineering. Supervisor of Bachelor project "Extending the Similarity-Attraction Effect: The Effects of When-Similarity in Computer-Mediated Communication". (Stanford University)

#### PROFESSIONAL SERVICE

#### **Referee Service (Selected)**

- Psychological Methods
- International Journal of Electronic Commerce
- Communications in Statistics
- International Conference System Sciences (HICSS). 2012, 2013, 2014, 2015
- Journal of Interactive Marketing.
- British Journal of Mathematical Psychology.
- International Conference on Human Computer Interaction (CHI). 2010, 2011, 2012, 2013, 2014
- International Conference on Persuasive Technology (Persuasive).
   2010, 2011, 2013, 2015, 2016
- Transaction on Interactive Intelligent Systems.
- Personal and Ubiquitous Computing.

## PROFESSIONAL EXPERIENCE & APPOINTMENTS

#### PersuasionAPI / Science Rockstars, Amsterdam, the Netherlands

Founder, Owner, and Chief Scientist

#### October 2011 to December 2015

- Founder of a startup together with Arjan Haring, Jay de Groot, and Sjoerd Mulder.
- Provides an API for a set of machine learning algorithms to dynamically adapt influence strategy selection to individual customers.
- Company sold to Webpower B.V. in November 2014.
- Clients (e.g.): UPC, Booking.com, Rovio, KLM, NIBC, ING, G-Star, etc.
- http://www.sciencerockstars.com http://www.persuasionapi.com http://www.webpower.nl

#### Philips Research, Eindhoven, the Netherlands

#### Research Scientist

#### September 2008 to August 2012

- Member of the Brain Body and Behavior Group
- Research projects in collaboration with Philips DirectLife aimed at improving the performance of their persuasive technology (the Philips Activity Monitor
- Supervisor: Dr. Boris de Ruyter

#### De Vos en Jansen Marktonderzoek, Nijmegen, the Netherlands

Research Development Manager

#### September 2007 to September 2008

- Responsible for the development of new standardized research methods.
- Software engineer writing the online analysis software of the company. Implementing (e.g.) linear regression and analysis of variance in PHP.
- Supervisor: Drs. Ronald Jansen

#### Vodafone Group R&D, Maastricht, the Netherlands

Customer Insight Specialist

#### January 2007 to September 2007

- Member of the Customer Insight Group
- Development and implementation of digital research tools

Advisory roles: Currently occasional advisor to several (starting) companies, including: ConversionMob, de Verhalenmarkt, Xomnia, etc.

### PROFESSIONAL

#### Member of the ACM

**MEMBERSHIPS** 

Association for Computing Machinery.

#### PUBLIC SERVICE

#### Chairman of the board of the "Stichting Skateboarding Nijmegen"

- Chairman and end-responsible for a non-profit that runs an indoor skateboard park and youth center called "Waalhalla Centrum" in the city of Nijmegen, the Netherlands.
- Turn-over of Waalhalla Centrum is around € 500.000, with six full time employees.

#### Organizing committee member for Persuasive 2016

- Workshop chair
- Chair of session on Modeling and Methods

#### Active contributor to [R] packages

- oFMLR author of a package to estimate online finite mixtures of logistic regression models. Released January 2016.
- RStorm author of a package for the development of online algorithms based on the design of Storm. Released September 2013.
- nParLD package for non-parametric statistics. Provided an online interface to the package for CHI 2011.

#### PUBLIC SPEAKING Active presenter at several academic and commercial conferences.

#### (SELECTION)

#### Represented by "the Next Speaker". http://thenextspeaker.com

- Academic (e.g.): Keynote speaker at: Persuasive 2016 Workshop on Personalized Persuasion, Ambient Intelligence 2014, Persuasive 2012.
  - Speaker at: DSC/t 2016, IFCS 2013, HICSS 2013, Persuasive 2009, 2010, CHI 2010, 2011, 2012, Interact 2009.
- Non-academic (e.g.): Keynote speaker at: Digital Marketing, 2015, The Webanalytics conference, 2013, Neuro Marketing World Forum 2013.
  - Speaker at: TEDxTilburg, 2012, Philips MediaX Summer Sessions 2010, TEDxHU 2011, Design for Conversion 2011, Digital Marketing Life 2012. and many others.
- Speaker for "De Universiteit van Nederland" (October 2014). Public lecture series on research methods and statistics broadcasted on national television.

- SOFTWARE SKILLS [R], Java, JavaScript, PHP, Phyton, HTML, UNIX shell scripting, SQL, MySQL, ActionScript, SPSS scripting, MongoDB.
  - [R]: Large scale experience with usage of R for analysis. Experience creating advanced [R] packages using C++.
  - MapReduce: Experienced writing map reduce queries for MongoDB and Hadoop.
  - JAGS: Experience building Bayesian hierarchical models using [R] and JAGS.
  - SPSS: Experienced SPSS user.

#### **EXPERTISE**

#### Research methods & Statistics, Data Science:

 Experimental Methods, Correlational Methods, Model Fitting, Non-parametric Statistics, Bayesian Statistics, Machine Learning, Data Mining, Data Science.

#### Persuasion / Influence:

 Persuasion, Persuasive Technology, Influence, Similarity effect, (Social) Influence Strategies, Computer-tailored education, Persuasion Profiles.

#### AWARDS

#### 2016: Best Paper Award at Intetain 2016

• For paper entitled: "Do Warriors, Villagers, and Scientists Decide Differently? The Impact of Role on Message Framing". Together with Broekhuijsen, M. & van der Putten, P.

#### 2013: Outstanding Doctoral Research Award at BCSI 2013

• For paper entitled: "Pricing new Products with Pay-What-You-Want". Together with Poyry, E. & Parvinen, P.

#### 2013: Best Doctoral Thesis TU/e (Industrial Design) 2012

• Best doctoral thesis: "Personalised Persuasion in Ambient Intelligence."

#### 2010: Best Paper Award Persuasive 2010

• Best paper award for the paper entitled: "Individual Differences in Persuadability in the Health Promotion Domain"

#### 2005: Unilever Research Prize 2005

• Best master thesis 2005 for the thesis "An Exploration of Fad Products and Explanations for their Unusually high Adoption Rates."

#### REFERENCES AVAILABLE TO CONTACT

#### Prof.Dr. Panos Markopoulos (e-mail: p.markopoulos@tue.nl; phone: +31 40 247 5247)

• Professor Industrial Design, Technical University of Eindhoven Industrial Design Den Dolech 2, 5600 MB Eindhoven.

#### **Dr. Martha Russell** (e-mail: nass@stanford.edu; phone: +1-650-723-1616)

• Director, MediaX, Stanford University 450 Sierra Mall, Stanford CA, USA.

#### **Prof.Dr. Petri Parvinen** (e-mail: petri.parvinen@aalto.fi; phone: +35-850 3120905)

• Professor of Sales Management Aalto University School of Economics (Marketing Department) P.O. Box 21230, FI-00076, Aalto, Finland.

More references available upon request.

#### More INFORMATION

For more information please contact Dr. Maurits Kaptein, (e-mail: maurits@mauritskaptein.com; phone: +31-6 21262211)