# Peter Sebastian Riefer

3 Burnham House Sulgrave Road W6 7QW London, UK

## Professional experiences

05/2018 – today Senior Data Scientist @ dunnhumby Ltd, London, UK

Developing science for dunnhumby's customer data science platform

- Automatized analysis of out-of-stocks and identification of lost spend due to unavailable products
- Impact of internal (e.g., prices and promotions) and external factors (e.g., weather) on sales performance of retailers
- Delivering analytical products that can easily be adapted to the needs of different clients

09/2016 - 05/2018 Data Scientist @ dunnhumby Ltd, London, UK

Creating solutions to understand and serve shoppers' needs

- Optimisation of coupon targeting to increase spend and number of visits
- Topic modelling and identification of shopping missions
- Agent-based modelling to simulate development of the retail market

03/2013 – 05/2016 PhD student @ dunnhumby Ltd, London, UK

PhD project in collaboration with University College London

- Modelling when people are interested in exploring new brands
- Improving coupon efficiency while sending coupons to explore new brands to those customers who are interested in exploring

### Education

09/2012 – 08/2016 University College London, UK

PhD in Cognitive Psychology on the topic of "Human exploratory decision-making"

Recipient of the UCL IMPACT award

09/2011 – 08/2012 | University College London, UK

MSc in Cognitive and Decision Sciences

Graduated with Distinction

09/2009 – 08/2011 Zeppelin University Friedrichshafen, Germany

MA in Management & Economics

- Graduated with a GPA of 1.3
- Recipient of the Zeppelin stipend award

10/2006 – 08/2009 | Ilmenau University of Technology, Germany

BSc in Media Economics

Graduated with a GPA of 2.1

#### Skills

Languages: German (mother tongue), English (fluent), French (advanced),
Portuguese (beginner and currently learning)

- Programming: Python (lingua franca for my work), proficient in PySpark, HTML and Javascript
- Big data systems: well experienced in SQL, Hadoop and Spark
- Proficient in using analytical software, such as, R, SAS and SPSS
- Media editing: Adobe Photoshop, Premiere, After Effects
- Skilled in presenting projects and proposals to clients, co-workers and expert, as well as non-expert audiences
- Comprehensive experience as statistics tutor and seminar instructor with full responsibility for my own curriculum

### Invited talks

- 01/04/2015, University of Stirling: Exploratory decision-making in the supermarket.
- 03/02/2015, City University of London: *Coherency maximization versus uncertainty minimization: how people explore subjective choices.*
- 03/02/2016, Metropolitan University London: *How coherency maximizing exploratory choices* can shape preferences for future choices.

# **Publications**

- Riefer, P.S., & Love, B.C. (2017). *Coherency-maximizing exploration in the supermarket. Nature Human Behaviour, 1, 0017.*
- Riefer, P.S., & Love, B.C. (2015). *Unfazed by Both the Bull and Bear: Strategic Exploration in Dynamic Environments.* Games, 6, 251-261.
- Richardson, D. C., Riefer, P. S., Love, B. C., Lotto, B., Clarke, R. C., Dale, R., Rogers, J., Ireland, J. (2013): *Experiments in dynamic group action and decision making: How crowds of people can walk a tightrope together and survive a zombie attack.* Paper presented at the 35th Annual Conference of the Cognitive Science Society. Berlin, Germany.