

Lara Vomfell

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Education

- 10/2017 - 02/2021 **Applied Statistics for Behavioural Science, PhD** **University of Warwick**
Coventry, UK
- Thesis: “Statistical modelling of spatio-temporal decision data”
 - Bridges Leverhulme Scholarship for bridging the social and mathematical sciences
 - Outputs: Publication at Nature Human Behaviour, new initiative at the police on my actionable recommendations and multiple talks at public round tables
- 10/2015 - 09/2017 **Economics, MSc** **Humboldt University of Berlin**
Berlin, DE
- Specialization: Advanced Statistics and Predictive Analytics
 - GPA of 1.7 (top 5%); Semester abroad at Nova University of Lisbon, PT
 - Thesis: “Improving Crime Forecasts with Taxi and Twitter Data”; highest possible grade and peer-reviewed publication
- 10/2011 - 02/2015 **Politics and Economics, BA** **University of Münster**
Münster, DE
- GPA of 1.7 (top 5%); Semester abroad at Federal University of Santa Catarina, BR
 - Thesis: “Surveying Data Marketplaces: Trends and Developments”; highest possible grade and peer-reviewed publication

Experience

- 12/2018 **Researcher** **Alan Turing Institute**
London, UK
- Worked with Defence Science and Technology Laboratory during data sprint
 - Developed new approach to sample size selection for hazardous experiments, reducing experimental effort by 40%
- 07 - 10/2015 **Internship (Science Communication)** **OECD**
Berlin, DE
- Designed the OECD Statistic of the Day, leading to record engagement on Facebook
 - Innovated OECD science communication by directly involving OECD statisticians
- 01/2013 - 08/2015 **Research Assistant** **University of Münster**
Münster, DE
- Published research on data marketplaces (Chair of Computer Science)
 - Built SQL database on electric mobility (European Research Center for Information Systems)
 - Analyzed income inequality data (Chair of Political Economy)
- 02 - 04/2014 **Internship (Financial Analysis)** **Commerzbank AG**
Frankfurt, DE
- Developed bespoke customer segmentation at Germany’s second largest bank
- 06/2011 - 05/2012 **Project Manager** **Model UN Schleswig-Holstein**
Kiel, DE
- 5-day conference with 550 participants in Schleswig-Holstein’s state parliament
 - Managed 70 staff, oversaw €120,000 budget, acquired and maintained sponsors

Skills

Statistical modeling	Linear, logistic and count data models; spatio-temporal point processes; supervised machine learning; Bayesian inference; hierarchical & mixed models
Coding	R, Python, SQL
Languages	German (native), English (fully proficient), Portuguese (basic), French (basic)

Publications and Work in Progress

Officer bias, over-patrolling, and ethnic disparities in stop and search. **Vomfell, L.** and N. Stewart (2020). *Nature Human Behaviour*. Forthcoming

Robust Bayesian Inference for Discrete Outcomes with the Total Variation Distance. **Vomfell, L.** and J. Knoblauch (2020). Submitted to *AISTATS*

The spatio-temporal nature of domestic abuse reporting. **Vomfell, L.** and J. Povala. Work in progress

Improving crime count forecasts using Twitter and taxi data. **Vomfell, L.**, W. K. Härdle, and S. Lessmann (2018). *Decision Support Systems*. 113, 73–85

A classification framework for data marketplaces. Stahl, F., F. Schomm, G. Vossen, and **L., Vomfell** (2016). *Vietnam Journal of Computer Science*. 3. 3, 137–143

Marketplaces for digital data: Quo vadis? Stahl, F., F. Schomm, **L., Vomfell**, and G. Vossen (2015). ERCIS–European Research Center for Information Systems. Working Paper 24

Selected presentations

07/2020	Stop & Search Commission, West Midlands PCC	Birmingham, UK
11/2019	Meeting of the Society for Judgement and Decision Making	Montréal, CA
09/2019	IAREP/SABE Conference	Dublin, IE
08/2019	Subjective Probability, Utility, and Decision Making	Amsterdam, NL
05/2019	Chicago Booth Invited seminar	Chicago, US
08/2018	High Dimensional Nonstationary Time Series Invited seminar	Berlin, DE

...and more than 20 other presentations at conferences, workshops and public events

Fellowships and awards

2017 - 2021	Bridges Leverhulme Doctoral Scholarship for tuition fees+maintenance £14,254 p.a.
2018, 2019	Bank of England Award for teaching ‘Big Data Analytics’ to BoE employees
08/2018	Visiting Researcher High Dimensional Nonstationary Time Series group in Berlin
2015	Thesis Award Best bachelor’s thesis in CS awarded by consultancy <i>zeb</i> , €1,000 prize
2013	PROMOS Scholarship International mobility scholarship, awarding €4,000

Initiatives

- **Bridges/CAGE Summer School in Behavioural Economics (2019):** Initiated and organized three-day summer school in Venice with top researchers from the UK and US and more than 40 participants
- **Mentoring programme (2019 - ongoing):** Initiated and organized professional development seminars, facilitated structured mentoring access and provided support for struggling students
- **Research Hour (2018 - ongoing):** Initiated and organized weekly seminar to discuss behavioural & methodological research
- **Women in Behavioural Science (2017):** Organized one-day conference in Warwick highlighting extraordinary behavioural scientists from UK and Europe with more than 50 participants