

Lara Vomfell

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Experience

02/2021 - **Behavioural Data Scientist** **Lloyds Banking Group**
London, UK

- Leveraging transaction data with python and SQL to solve challenging business problems within the group
- built an API pipeline using NLP to enrich transactional data

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 database on electric mobility (ERCIS)
- Analyzed income inequality data (Chair of Political Economy)

02 - 04/2014 **Internship** **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

Education

10/2017 - 05/2021 **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

Skills

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

Publications and work in progress

Officer bias, over-patrolling, and ethnic disparities in stop and search. **Vomfell, L.** and N. Stewart (2021). *Nature Human Behaviour*

Robust Bayesian Inference for Discrete Outcomes with the Total Variation Distance. **Vomfell, L.** and J. Knoblauch (2021). Submitted to ICML

(No) Spillovers in reporting domestic abuse to police. **Vomfell, L.** and J. Povala (2021). In preparation

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 **Vomfell, L.** (2016). *Vietnam Journal of Computer Science*. 3. 3, 137–143

Marketplaces for digital data: Quo vadis? Stahl, F., F. Schomm, **Vomfell, L.**, 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 tuitionfees+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 - 2021):** Initiated and organized professional development seminars, facilitated structured mentoring access and provided support for struggling students
- **Research Hour (2018 - 2021):** 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