

77 Newcombe Road, Coventry CV5 6NH, United Kingdom

My research leverages statistical innovations to investigate policy-relevant decision problems in the social sciences.

### **Education**

**Behavioural Science, PhD** 

Warwick, UK

10/2017 - 09/2021

University of Warwick

- Bridges Leverhulme programme
- Thesis: "Spatial and behavioral patterns in police officer decisions"
- Supervisors: Neil Stewart, Nattavudh Powdthavee and Julia Brettschneider

**Economics, MSc**Berlin, Germany

HUMBOLDT UNIVERSITY OF BERLIN

10/2015 - 09/2017

- GPA of 1.7 (top 5%); 120 + 32 ECTS
- Thesis: "Improving Crime Forecasts with Taxi and Twitter Data"; grade: 1.0
- Semester abroad at Nova University of Lisbon (09 12/2016)

#### **Politics and Economics, BA**

Münster, Germany

10/2011 - 02/2015

University of Münster

- GPA of 1.7 (top 5%); 180 + 26 ECTS
- Thesis: "Surveying Data Marketplaces: Trends and Developments"; grade: 1.0
- Semester abroad at Federal University of Santa Catarina, Brazil (07/2013 02/2014)

### Allgemeine Hochschulreife / A-levels

Frankfurt, Germany

MUSTERSCHULE
• GPA of 1.2 (top 3%), graduation with distinction

Year abroad at Uttaradit Daruni, Thailand (07/2007–02/2008)

### **Publications**

### Improving Crime Count Forecasts with Twitter and Taxi Data

Decision Support Systems, 113, 73–85

Vomfell/Härdle/Lessmann

2018

06/2011

- Using spatial and machine learning models, predictions for New York City crime over 26 weeks are enhanced
- Property crime depends on local opportunities as captured by new data sources
- · Violent crime does not emerge from short-run human dynamics

### A Classification Framework for Data Marketplaces

Vietnam Journal of Computer Science

3.3, 137-143

STAHL/SCHOMM/VOSSEN/VOMFELL

2016

2015

- Understanding pricing mechanisms of data
- Development of a scheme to group emerging data marketplaces

### Marketplaces for Digital Data: Quo Vadis?

ERCIS Working Papers, Vol. 24

VOMFELL/STAHL/SCHOMM/VOSSEN

• Analysis of 72 electronic marketplaces where data is sold

Identification of two segmented markets

## Work in progress\_

- Differences in police officer experience and attitude are not the origin of ethnic bias in stop and search (with Neil Stewart) Revise & resubmit at Nature Human Behaviour (PDF)
- Modeling officers' stop and search decisions with point processes
- Improving measures of stop and search disparities
- Is crime deterrence spatio-temporally varying? (with Julia Brettschneider)
- Outlier-robust inference in cognitive science (with Jeremias Knoblauch)

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## **Experience**

**OECD** Berlin, Germany

INTERNSHIP

07/2015 - 10/2015

Münster, Germany

• Independent research and editing of the OECD Statistic of the Day

• Daily exchange with OECD statisticians and communication to journalists

**European Research Center for Information Systems** 

RESEARCH ASSISTANT 05/2014 - 10/2015

• Research and data analysis on the acceptance of electric mobility

Chair of Computer Science Münster, Germany

RESEARCH ASSISTANT 05/2015 - 08/2015

Independent published research on data marketplaces

**Commerzbank** Frankfurt, Germany

**INTERNSHIP** 02 - 04/2014

• Financial analysis at Germany's second largest bank

Chair of Political Economy Münster, Germany

RESEARCH ASSISTANT 01 - 08/2013

• Data analysis on income inequality data

## Selected Presentations and Seminars

11/2019	SJDM, Oral presentation	Montréal, Canada
09/2019	IAREP/SABE, Oral presentation	Dublin, Ireland
08/2019	SPUDM, Oral presentation	Amsterdam, Netherlands
05/2019	Chicago Booth, Invited Seminar	Chicago, US
01/2019	Stop and Search Commission, West Midlands PCC, Invited Talk	Birmingham, UK
08/2018	Privatissimum Statistik, Invited Seminar	Berlin, Germany

## Fellowships and Awards\_

2017 - 2021	Bridges Leverhulme, Doctoral Scholarship	
08/2018	Visiting Researcher, at the High Dimensional Nonstationary Time Series group at HU Berlin	
2018, 2019	Bank of England, Outstanding contribution to teaching 'Big Data Analytics' for two consecutive years	
2016	Data Mining Cup, 10th to 49th place	
2015	Thesis Award, best bachelor's thesis in computer science awarded by zeb	

2013 **PROMOS Scholarship**, international mobility scholarship

# Skills\_\_\_\_\_

**Programming** R (advanced skills in statistical computing, algorithm design, computational optimisation,

and parallel programming), Python (basic skills)

**Languages** German (native), English (fluent), Portuguese (fluent), French (basic)

## Extracurricular Activities\_

**Service** Bridges/CAGE Summer School in Behavioural Economics (2019); Early Career Research in Behavioral Science

in Warwick (2018–); Women in Behavioural Science (2017)

**Hobbies** Thai Boxing, hiking, sewing, knitting and pattern drafting