

# Annika Stechemesser

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## Education

- 2019-present **PhD Candidate**, *Potsdam Institute for Climate Impact Research*.  
PhD student in the research domain Complexity Sciences with Prof. Dr. Anders Levermann and Dr. Leonie Wenz. Focus on understanding societal conflicts in response to weather extremes with non-linear data analysis and machine learning approaches.
- 2017–2018 **MSc in Mathematics for Real-World-Systems (Distinction)**, *University of Warwick*.  
MSc thesis - Improving Cell Type Identification of Single Cell Data by Iterative Graph Based Noise Filtering  
Group research project - Machine Learning in Julia
- 2013–2016 **BSc in Mathematics (grade 1.5)**, *University Duisburg-Essen, Germany*.  
BSc thesis - Iwasawa Algebras
- 2013 **Abitur with grade 1.0**, *Gymnasium Luisenschule, Muelheim an der Ruhr, Germany*.  
Price for graduating as one of the best students in North Rhine-Westphalia.

## Experience

### Professional Experience

- 06/2019 **Government Operations Research Service, UK Government, Department for Education**.  
Internship with the UK Government Operations Research Service, placement in the Department for Education. Development of an app for fraud detection in funding allocations.
- 10/2018 **Research Assistant, Department for Computer Science, University of Warwick**.  
Bioinformatics research with focus on single cell analysis in the research group of Sascha Ott. Publication in Trends in Plant Science:  
*Single-Cell Transcriptomics: A High-Resolution Avenue for Plant Functional Genomics*,  
<https://doi.org/10.1016/j.tplants.2019.10.008>
- 09/2018 **German Bundestag**.  
Internship in the German Bundestag with MP Kerstin Griese.

### International Programmes

- 2016–2017 **Year Abroad (Interdisciplinary Mathematics)**, *University of Warwick*.  
Year abroad at the University of Warwick after my BSc studying Interdisciplinary Mathematics. After this year I decided to continue studying for my Masters at the University of Warwick.
- 2015 **Summer School: Graph Theory (Grade A)**, *Harvard University, USA*.  
Four week intense summer school programme at Harvard University with focus on graph theory. Graduated with the highest grade possible.

### Workshops and Conferences

- 03/2019 **Harvard World Model United Nations, Madrid**.  
Diplomacy Award, represented Kenya in SPECPOL

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🌐 <https://www.pik-potsdam.de/members/stecheme>

02/2018-20 **London Model United Nations Conference, London.**  
Diplomacy Award, represented the NGO CARE USA in UNOCHA (2019)  
Diplomacy Award, represented the USA in UNESCO (2018)  
Director of the World Social Forum at LIMUN 2020

12/2018 **Data Study Group, Alan Turing Institute.**  
One week intense data science challenge with early career researchers from diverse backgrounds. Worked in cooperation with the Defence Science and Technology Laboratory (UK government) on the project "*Seeing the unseen: Interrogating cellular-level response to hazardous materials*".

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## Scholarships

- 2017–2020 **Be.boosted fellowship.**  
Leadership programme with focus of developing soft skills. Intense group as well as one-on-one coaching with peers and reputable experts and participation in large scale international conferences such as World Model United Nations.  
Lead instructor for the be.boosted fellowship of 2020.
- 2014–2019 **Academic Scholarship of the "Evangelisches Studienwerk Villigst".**  
Competitive academic scholarship from one of the 12 large German scholarship organisations. Funding for Bachelor and Master with additional studies abroad.
- 2013–2014 **Deutschlandstipendium, University Duisburg-Essen.**  
Academic scholarship from the University Duisburg-Essen offered to students with outstanding grades.

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## Skills

### Programming Skills

Python, R, Julia

### Language Skills

German (native), English (fluent), French (DELFL Certificate B2), Spanish (basic)

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## Teaching and Volunteering

### Teaching

Teaching experience as Teaching Assistant at University of Warwick and University Duisburg-Essen (Graph Theory, Combinatorial Optimisation, Algorithms, Discrete Mathematics, Interdisciplinary Computer Modelling, Year 12 MAT problem solving course, Linear Algebra).

### Volunteering

- Present member of Klimadelegation e.V., instructor at be.boosted, climbing instructor at DAV Potsdam.
- Past Elections officer in the Student Senate of the Evangelisches Studienwerk Villigst, local group leader at the Evangelisches Studienwerk Villigst, voluntary tutoring for students from unprivileged backgrounds, organiser of children's summer camps, martial arts teacher.