

# Alexander G. Hurley

DATA AND POLICY ANALYST

Berlin, DE

✉ agl.hurley@gmail.com | 🏠 aglhurley.rbind.io | 📞 0000-0002-9641-2805 | 🌐 the-hull | 📄 aglhurley | 🐦 aglhurley

## Goal

Drive decision-making in organizations as well as the public while enjoying myself - usually by solving puzzles or generating tools and toys.

## Key Achievements

- Completed data science boot-camp and prototyped a flask web-application with a recommendation algorithm.
- Developed and contributed to several open-source applications for research, including an interactive data processing tool.
- Developed and executed research study on Berlin's street trees to inform climate change adaptation. The work included a reproducible pipeline for ETL, statistical analyses, visualization, and document generation.
- Led and collaborated on several research projects across academia and industry requiring extensive expeditions, data analyses, and communication with stakeholders through peer-reviewed publications and presentations.
- Led and contributed to organizations and projects promoting open and reproducible science as well as computer literacy.
- Led and contributed to projects on data and policy analyses with direct impact on the German government's actions.

## Employment and research experience

### German Council of Experts on Climate Change

SCIENTIFIC ASSOCIATE

Berlin

2022 - present

### Helmholtz Centre Potsdam - GFZ German Research Centre for Geosciences

VISITING SCIENTIST

Potsdam

2022 - 2023

### Helmholtz Centre Potsdam - GFZ German Research Centre for Geosciences

POST-DOCTORAL RESEARCHER

Potsdam

2019 - 2021

### University of Birmingham

TEACHING ASSOCIATE

Birmingham

2015 - 2019

### Leibniz-Institut für Gewässerökologie und Binnenfischerei

RESEARCH INTERN

Berlin

2013 - 2013

### Universität Bayreuth

RESEARCH ASSISTANT

Bayreuth

2011 - 2013

### Universität Bayreuth

RESEARCH ASSISTANT

Bayreuth

2010 - 2011

## Education

### University of Birmingham

PHD

Birmingham

2015 - 2020

### University of East Anglia

APPLIED ECOLOGY, EMMC MSc (DISTINCTION)

Norwich

2014 - 2015

### Universidade de Coimbra

APPLIED ECOLOGY, EMMC MSc (DISTINCTION)

Coimbra

2014 - 2014

### Universidad San Francisco de Quito

APPLIED ECOLOGY, EMMC MSc (DISTINCTION)

Quito

2014 - 2014

### University of Poitiers

APPLIED ECOLOGY, EMMC MSc (DISTINCTION)

Poitiers

2013 - 2014

### Universität Bayreuth

BSc GEOÖKOLOGIE

Bayreuth

2010 - 2013

## Skills

---

**Quantitative** (examples: [https://github.com/the-Hull/code\\_portfolio](https://github.com/the-Hull/code_portfolio))

- Data processing, visualization, analyses, frequentist statistics, machine learning (advanced: R, DPLYR, DATA.TABLE, GGPLYR, PLOTLY, MGCV; intermediate: Excel; intermediate/basic: PYTHON, SCIKIT-LEARN, PANDAS, SEABORN, MATPLOTLIB; basic: MATLAB),
- Data(base) management and ETL (advanced: R; basic: POSTRGRESQL),
- GIS, spatial analyses (R, TERRA, SF, ESRI ARCMAP),
- Web-application development (advanced: SHINY, basic: FLASK),
- Web-scraping,
- Version control (GIT, GITHUB), continuous integration (GitHub Actions),
- Reproducible and open science (advanced: R, RMARKDOWN, DRAKE, TARGETS, RENV, GITHUB, basic: DOCKER)

### General

- Considerate, empathetic, team-oriented approach to work
- Excellent written and oral communication to experts and lay people
- Project management and workshop organization
- German and English native speaker

## Software

---

- **erkolor** (R) <https://github.com/the-Hull/erkolor> || **Nextrip prototype** (PYTHON, FLASK AND SCIKIT-LEARN) - <http://aglhurley.pythonanywhere.com> & <https://github.com/the-Hull/nextrip> || **remis** (R, CURL, HTTPR) - <https://github.com/the-Hull/remis> || **datacleanr** (R, SHINY) - <https://the-hull.github.io/datacleanr> || Peters *et al.* (2020). **TREX** (R) - <https://the-hull.github.io/TREX> (Contributed to code refactoring, continuous integration and testing) || Peters *et al.* (2018) **RAPTOR** (R) - <https://doi.org/10.1016/j.dendro.2017.10.003> (Contributed to code refactoring, continuous integration and testing) || **BIFoR Data and Outreach Platform POC** (R, SHINY) - <https://aglhurley.shinyapps.io/bifor>

## Professional and personal activities

---

- Led, delivered or contributed to several workshops (10), seminars (3) and outreach activities (1); organized (1) and co-chaired (3) conference sessions
- Supervision: 1 research assistant, remote field work for 8 under-graduate and 1 post-graduate dissertations, 1 under-graduate professional development internship, co-supervised 1 post-graduate dissertation
- Geoforschungszentrum Potsdam Post-Doctoral Researcher Representative (2021)
- Co-founded DEEP Platform for outreach and teaching (2020). <https://deep-tools.netlify.app/>
- Course Representative on Post-Graduate Taught Affairs Committee (2014)
- OpenNASA Datanaut Citizen Data Scientist / Volunteer (2018 - present)
- FishAct (frm. The Black Fish) Social Media Coordinator Germany (2014 - 2015)

## Awards

---

- 2017 British Ecological Society Training and Travel Grant
- 2016 Alpkit Personal Development Grant
- 2014 Merit Grant for Outstanding Academic Achievement (Portuguese Government)
- 2013 Erasmus Mundus scholarship of the European Commission for Master's of Excellence

## Publications and conferences

---

- 10 peer-reviewed publications (2 first-author)
- 6 reports
- 9 conference contributions