# Philipp Waack

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*I am working as a full stack developer, data analyst and data governance expert. I am a team player and a curious, open-minded person.*

## Education

**Humboldt Universität zu Berlin**                                                          **Mark: 1,9**
*Master of Science; Computer science*                                                      *2016–2019*
Master thesis: *Empirical study about the influence of social dimensions on the SCHUFA-Score*

**Technische Universität Dresden**                                                          **Mark: 2,6**
*Bachelor of Science; Media and computer science*                                          *2012–2017*
Bachelorarbeit: *Benutzbarkeitskonzept für VPN-basierte Anonymisierung mobiler Geräte*

**Gymnasium Willhöden, Stadtteilschule Blankenese Framstraße**                              **Mark: 2,5**
*Abitur; General matriculation standard, Hamburg*                                          *2002–2011*

## Work experience

**acs-plus**                                                                                  **Berlin**
*Data Governance Expert*                                                                   *since 12/19*
Focus on the link between Data Science, Data Engineering, Software Development and the topic of Data Governance.

**acs-plus**                                                                                  **Berlin**
*Student assistant, Data Scientist*                                                        *10/17–10/19*
Support and autonomous accomplishment of data analysis and data modeling as well as implementation of applications to visualize and access data.

**Zentrum für Informationsdienste und Hochleistungsrechnen (ZIH)**                          **Dresden**
*Student assistant, Editor*                                                                *04/16–09/16*
Creation of editorial content and technical instructions for the Content Management System of the ZIH at the Technischen Universität Dresden.

# Skills

**Scripting languages**:
I have most experience in working with Python and JavaScript since I implemented professional data driven web applications using those scripting languages. I also used mainly Python and R in professional data analysis projects. In the voluntary work project afeefa.de I gained some experience with Ruby and the Ruby on Rails web framework. At work and for private projects I use Bash scripting to automate specific tasks like creating backups.

**Web Technologies & Frameworks**:
To implement web applications I have worked mainly with python Flask and the template engine Jinja2 or implemented REST APIs to communicate with React frontends. In some projects I also worked with Express.js as a backend. I have experience in working with general HTML, CSS, JavaScript and for dynamic user interfaces I used mainly React and Bootstrap as frontend frameworks.

**Data Analysis**:
In data analysis projects I used R and different Python libraries to analyse, visualize data and to train models with data. For statistical data analysis and data cleaning I worked with pandas and SciPy. To visualize data for analysis I used mainly matplotlib and seaborn. For interactive, data driven web applications I worked with D3.js and Plotly. To train statistical models and machine learning models I used mainly sklearn. But I gained also some experience in working with TensorFlow and GPflow during my master thesis.

**Database Technology**:
In most web development projects and data analysis projects I worked with relational SQL Databases - I have experience with the DBMS MariaDB, PostreSQL and SQL Server. In some projects I also worked with noSQL databases. I have experience in working with MongoDB and gained some experience from one project in working with the graph database Neo4j

**Server Technology**:
I set up multiple web applications using the Apache HTTP server and Nginx.

**Versioning and Deployment**:
For code versioning, collaboration in agile teams I work with Git in GitLab and GitHub. To create testing and deployment pipelines I work with GitLab CI/CD and with GitHub Actions - depending on the project. To deploy projects I used Docker to create containerized applications. For programming I mostly use the IDE Visual Studio Code.

**Programming languages**:
In multiple game development projects I gained experience in programming with C# - developing games in Unity, MonoGame and plain C#. In study projects I also gained experience in working with Java - especially while implementing a Java based Android application to create a UI for a anonymization service during my bachelor thesis. I also gained some experience in C during my study project to port a word embedding space model for document ranking.

**Game Engines**:
I developed multiple game prototypes with the framework MonoGame and the game Engine

Unity.

**Operating Systems**:
I work frequently with Ubuntu and Windows. I have also experience in working with macOS.

**Conception & Collaboration Tools**:
To create frontend mockups I use Figma. To work remotely with others and to create concepts for database models and processes I use the collaboration platform Miro.

**Image Processing**:
Basic knowledge in Gimp, Inkscape and Scribus. For 2D Game Projects I created Sprites and Animations in Aseprite.

**Office applications**:
I frequently work open source Office programms, PowerPoint and LaTeX

## Languages

**German**: Native language

**English**: Fluent

**Spanish**: Basic knowledge

## Internship and side jobs

**surfcamplaspalmas.com**                                    **Las Palmas de Gran Canaria**
*Praktikum, Web Content Manager, SEO-Optimization*                            *03/14–06/14*
Emphasis on writing search engine optimized blog posts about surfing.

**Edeka, Schachtrupp, Störmer Murphy and Partners**                              **Hamburg**
*Various side jobs, temporary job*                                            *03/12–09/12*

**Hamburger Abendblatt**                                                         **Hamburg**
*Internship, Journalist*                                                      *01/12–02/12*
Internship with emphasis on autonomous local journalistic work in the district Bergedorf for the web presence of daily newspaper Hamburger Abendblatt.

**Elbe Wochenblatt**                                                            **Hamburg**
*Internship, Editor*                                                          *11/11–01/12*
Research and creation of reports and stories for a local newspaper based in Hamburg.

**Infected Postproduction**                                                     **Hamburg**
*Internship, Audio-visual media designer*                                     *08/11–10/11*
Emphasis on cutting and post-production of commercials.

## Voluntary work and further training

**Journalistisches Arbeiten**                                                    **Berlin**
*Seminar*                                                                     *09/19–10/19*
Seminar with a focus on methods and rules for journalistic writing. Research and creation of a reportage.

### Storytelling in Werbung, Journalismus und Politik        Berlin
*Seminar*        *09/17–10/17*

Seminar with an emphasis on different storytelling techniques and dramaturgic basics (e.g. character development and the hero's journey). Development and presentation of a story.

### Art project web residency: x-temporary.org        Berlin
*Voluntary, Webdesign*        *02/17–02/19*

Digital residency for artists. Development of a website and technical support for artists.

### Student newspaper ad rem        Dresden
*Voluntary, Journalist*        *04/15–09/16*

Research and creation of journalistic reports about technical and digital topics, higher education policies and events. Director of the technical department.

### Web application afeefa.de        Dresden
*Voluntary, Webdesign, Ruby-on-Rails Developer*        *08/15–04/16*

Development of a digital platform for offers and participation for refugees.