

Philipp Waack

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

Education

Humboldt Universität zu Berlin	Mark: 1,9
<i>Master of Science; Computer science</i>	<i>2016–2019</i>
Master thesis: <i>Empirical study about the influence of social dimensions on the SCHUFA-Score</i>	
Technische Universität Dresden	Mark: 2,6
<i>Bachelor of Science; Media and computer science</i>	<i>2012–2017</i>
Bachelorarbeit: <i>Benutzbarkeitskonzept für VPN-basierte Anonymisierung mobiler Geräte</i>	
Gymnasium Willhöden, Stadtteilschule Blankenese Framstraße	Mark: 2,5
<i>Abitur; General matriculation standard, Hamburg</i>	<i>2002–2011</i>

Work experience

VDI/VDE-IT	Berlin
<i>Referent</i>	<i>since 05/23</i>
Work at the department research and development with a focus on IT solutions and data science topics.	
acs-plus	Berlin
<i>Data Governance Expert</i>	<i>12/19–03/23</i>
Focus on the link between Data Science, Data Engineering, Software Development and the topic of Data Governance.	
acs-plus	Berlin
<i>Student assistant, Data Scientist</i>	<i>10/17–10/19</i>
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
<i>Student assistant, Editor</i>	<i>04/16–09/16</i>
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, PostgreSQL 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 programmms, PowerPoint and \LaTeX

Languages

German: Native language

English: Fluent

Spanish: Basic knowledge

Internship and side jobs

surfcamplaspalmas.com

Praktikum, Web Content Manager, SEO-Optimization

Emphasis on writing search engine optimized blog posts about surfing.

Las Palmas de Gran Canaria

03/14–06/14

Edeka, Schachtrupp, Störmer Murphy and Partners

Various side jobs, temporary job

Hamburg

03/12–09/12

Hamburger Abendblatt

Internship, Journalist

Internship with emphasis on autonomous local journalistic work in the district Bergedorf for the web presence of daily newspaper Hamburger Abendblatt.

Hamburg

01/12–02/12

Elbe Wochenblatt

Internship, Editor

Research and creation of reports and stories for a local newspaper based in Hamburg.

Hamburg

11/11–01/12

Infected Postproduction

Internship, Audio-visual media designer

Emphasis on cutting and post-production of commercials.

Hamburg

08/11–10/11

Voluntary work and further training

Journalistisches Arbeiten

Seminar

Seminar with a focus on methods and rules for journalistic writing. Research and creation of a reportage.

Berlin

09/19–10/19

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.