# DR. KATJA DITTRICH

Data Scientist – Psychologist – Researcher

## **SUMMARY**

As a data scientist with a background in psychology and quantitative analysis, I bring a unique perspective to the field. My expertise includes processing, analyzing, and interpreting both structured and unstructured data using statistical and machine learning techniques to produce reliable predictions. I am skilled in deploying models into production environments, a critical step in turning theoretical models into practical tools. My experience in research, mentoring, and disseminating results has equipped me with the ability to effectively communicate complex data insights to both technical and non-technical audiences.

My background in psychology and psychotherapy has also endowed me with strong communication skills and an understanding of the human behavior that often underlies data patterns. This combination of technical expertise and interpersonal abilities enables me to deliver comprehensive data science solutions that are grounded in both technical rigor and a profound understanding of human factors.

### **TECHNICAL SKILLS**

Python / SQL / Git / Bash (intensively since June 2023), IBM SPSS (10 years), R/R Studio (5 years, especially ggplot2, tidyverse, lavaan). Machine learning and statistics (Trees, Computer Vision, NLP, Time Series). Data visualization. Docker / Streamlit / Huggingface. Google Cloud.

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Researchgate

Further Links:

LinkedIn

Github

Berlin, Germany

# **SOFT SKILLS**

Secure and professional communication in German and English with technical and non-technical audiences. Storytelling. Project management. Independent work. Analytical and critical thinking. Problem-solving. Working in interdisciplinary teams.

### **EDUCATION**

Data Science Professional Certification Data Science Retreat Berlin October 2023 to December 2023

Psychology Degree (Diploma) Humboldt University of Berlin October 2007 to October 2013

Doctorate in Psychology (Dr. rer. nat.) Humboldt University of Berlin February 2020

Licensed Psychotherapist (Cognitive Behavioral Therapy) Center for Psychotherapy at Humboldt University of Berlin April 2021

## **EXPERIENCE**

# Charité – Universitätsmedizin Berlin

Psychologist / Researcher November 2013 – April 2023

Cross-Project Tasks:

- Processing and analysis of data sets (SPSS, R): linear, logistic, Poisson regression, path analysis, SEM, growth curves, mediation, discriminant analysis, (M)ANCOVA, factor analysis
- Publication of results in international professional journals and presentation to clinical audiences at national and international conferences
- Cooperation with various departments and stakeholders
- Teaching in the medical degree program (communication, teamwork)

### March 2020 - April 2023

Senior Scientist

- Coordination of a multicentric care study (DEPSY) and a subproject of a multicentric intervention study (UBICA II)
- Supervision of doctoral candidates and students
- Data management and quality monitoring

Successful implementation of two multicentric studies (UBICA II and DEPSY) with limited resources. Development of a web-based database, survey tools, and study teams to execute the studies.

# November 2013 - February 2020

Junior Scientist / PhD Candidate

- Data collection using interviews and questionnaires with adults and children
- Recruitment of study participants

Successful completion of two studies (UBICA and Berlin LCS), preparation of my doctoral thesis, and publication of numerous scientific articles.

# **EXPERIENCE (CONTINUED)**

# Freiraum Psychotherapie

Psychotherapist April 2021 – March 2023

Application of Cognitive Behavioral Therapy techniques and related methods for the treatment of mental disorders.

### **CERTIFICATIONS**

#### **Data Science Retreat**

### September – December 2023

Data science bootcamp, covering topics related to machine learning, deep learning, computer vision, natural language processing, sequences, transfer learning, time series, tree-based methods, model deployment, vector databases, cloud, and data visualization. Tools and languages: Python (tensorflow, pytorch, numpy, pandas, transformers), Git/Github, SQL, Bash, Docker, Streamlit.

# **DeepLearning.Al**

# September – December 2023

Machine Learning Specialization (Credential)
Deep Learning Specialization (currently)

### **DataCamp**

# February 2023

Data Analyst with R (Credential)