### SABRINA MILLER

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### PROFESSIONAL SUMMARY

Data Analyst with a strong foundation in clinical and biomedical domains. Experienced in programming (MATLAB, Python, SQL), clinical data workflows, medical technologies, and interdisciplinary research. International academic background, fast learner, and passionate about data-driven healthcare innovation.

### **TECHNICAL SKILLS**

- Programming: MATLAB, Python, SQL, R, C, Java, JavaScript, HTML/CSS
- > Data Tools: Statistical Analysis, Data Merging, Data Cleaning, Preprocessing, Visualization, UI Development
- Clinical Tools: Experiment Design, Motion Capture (Qualisys), Visual3D, Force Platforms, Accelerometers, IMUs, Exosuits, MRI Data Handling
- Machine Learning: Supervised ML, Classification, Regression
- > **Software**: Microsoft Office, GitHub, Online Database Systems

### **PROFESSIONAL EXPERIENCE**

### Harvard University - School of Engineering and Applied Sciences, Boston, MA

Master's Thesis Researcher in Biodesign Lab

Jun 2025 – Dec 2025

- Conducting master's thesis research in collaboration with the Harvard Biodesign Lab.
- Responsible for organizing, cleaning, and merging large-scale datasets from multiple human studies.
- Supporting data infrastructure development to enable cross-study analysis in biomedical engineering contexts.
- Working primarily with MATLAB for data handling and preprocessing.
- Focus on improving data quality and consistency to support algorithm development and research insights.

## Al Developer – Wallinger Ricker Schlotter Tostmann, Munich, Germany

Apr 2025 - May 2025

- Developed an AI-based internal tool for processing and retrieving technical patent data using embeddings and LLMs.
- Enabled semantic document search and improved internal knowledge accessibility across departments.

### Programming Tutor (MATLAB) – Justus-Liebig-University, Giessen, Germany

Jun 2024 – Jul 2024 (Temporary)

- Delivered intensive MATLAB programming workshops for master's students, including GUI design and data processing.
- Designed hands-on exercises and provided tailored support to accelerate student learning.

## **Data Analysis Tutor (Voluntary)** – Justus-Liebig-University, Giessen, Germany

Apr 2024 - Aug 2024

- Assisted students with course content in "Specific Data Analysis", breaking down complex topics into understandable elements.
- Provided one-on-one guidance to reinforce theoretical understanding with practical examples.

### Graduate Student Research Assistant – Justus-Liebig-University, Giessen, Germany

*Apr 2024 – Jun 2024 (Temporary)* 

- Supported MRI-based research in the Cognitive Neuroscience Department, assisting with experiment setup, test subject coordination, and data acquisition.
- Contributed to structured neuroimaging workflows and upheld high standards in data quality and research execution.

## **Undergraduate Research Assistant** – University of Regensburg, Regensburg, Germany

Apr 2022 - Apr 2023

- Conducted literature reviews, experiment planning, lab work, and research documentation
- Assisted in editing and preparing publications for journal submission

### **EDUCATION**

Università di Torino, Turin, Italy – Exchange Semester (Erasmus+)

Oct 2024 – Mar 2025

Completed coursework in the "Biotechnology for Neuroscience" master's program, focusing on data science, biomechanics, and neuroimaging.

### Justus-Liebig-University, Giessen, Germany

Oct 2023 – Dec 2025 (Expected) – M.Sc. Human Movement Analytics

Focus: Data Analysis, Statistics, Medical Engineering, Experimental Design, Statistical Modeling

### University of Regensburg, Regensburg, Germany

Jul 2023 – B.A. Applied Movement Science

Minor: Information Science – Emphasis on Data Systems and Modeling

### **CERTIFICATIONS & TRAINING**

- Supervised Machine Learning (Stanford University via DeepLearning.AI)
- Advanced Learning Algorithms (Stanford University via DeepLearning.AI)
- Biomedical Research Investigators (CITI Program)
- General & Laboratory Safety, Laser & Soldering Safety (Harvard EHS)
- Introduction to Clinical Data (Stanford University, School of Medicine)
- SQL for Data Science (University of California, Davis)
- Introduction to Healthcare (Stanford University, School of Medicine)

### **PROFESSIONAL SKILLS**

- Analytical Thinking Skilled in breaking down complex problems and identifying patterns
- Attention to Detail Accurate, precise, and thorough in handling data and documentation
- Project Coordination Experienced in organizing tasks and managing timelines
- > Team Collaboration Strong communicator and reliable team player in interdisciplinary settings
- Fast Learner Able to quickly adapt to new tools, topics, and environments
- Scientific Communication Proficient in academic writing and presenting research
- Languages Fluent in German and English, intermediate French, basic Italian

### **OTHER EXPERIENCE**

Purchasing Clerk – Fonds Finanz Maklerservice GmbH, Munich, Germany

Jul 2023 – Aug 2023 (Temporary Position)

- Digitized and structured large volumes of physical purchasing data into a new internal system, improving data accessibility and organization.
- Supported the purchasing department during staff absences, handling procurement workflows and supplier coordination.

# **Children's Swimming Instructor** – University of Regensburg, Regensburg, Germany

Oct 2022 - Mar 2023

- Led beginner-level swim classes for children aged 5-10, tailoring instruction to individual skill levels.
- Created a safe, fun, and engaging environment using a child-friendly mix of theory, practice, and games.

### Team Lead - COVID-19 Testing Station - 21Dx GmbH, Munich, Germany

Oct 2020 - Dec 2021

- Managed daily operations, enforced health protocols, and oversaw staff scheduling and financial tracking.
- > Supervised and trained staff members, streamlining onboarding and ensuring efficient workflow during high-demand periods.