Curriculum Vitae

Dr. Alexander Britz

I am a trainer, facilitator, coach, and lecturer with a focus on leadership, creativity, and communication as well as data analysis and visualization. My mission is to help young scientists to be more effective and efficient to thrive in science and academia. As a scientist I performed interdisciplinary research between materials science, chemistry, and physics. I am an expert in investigating ultrafast dynamics using lasers, electron beams and x-rays at large scale facilities. Next to science and academia I am passionate about long distance running, biking, water sports and nature. As a volunteer I engage in politics of climate change.

Contact

Bernburger Str. 10
10963 Berlin
Germany

+49 151 47332037
mail@alexbritz.de
www.alexbritz.de

Skills & Expertise

Communication Trainings
Scientific Communication, Writing, Presentation, Conflict Resolution, Time- and Project Management, Career Development, Leadership

Programming and AI
- AI Tools for scientific research
- Python (data analysis, visualization, machine learning)
- Matlab
- WordPress

Scientific
Advanced expertise in optics, lasers, X-rays, spectroscopy, experimental automation, and material characterization

Languages
German (native)
English (full proficiency)
Spanish (fluent)
French (basic)

Achievements
- 25+ co-authored papers (h-index 18, google scholar)
- 20+ talks and conference contributions
- Trained 400+ young scientists

Professional Experience

Self-employed Trainer, Facilitator, Coach 03/2020 – present
I offer online and on-site workshops and courses for young scientists. The content includes project and time management, leadership, communication and conflict resolution, creativity, career development, and data analysis and visualization with Python. Furthermore, I develop novel methods to facilitate academic work in natural sciences.

Scientific Assistant 12/2020 – 02/2023
European XFEL GmbH, Hamburg Area, Germany
We design a virtual reality advanced laboratory course for STEM students of the Universität Hamburg.

Research Associate 01/2018 – 02/2020
Stanford University and SLAC National Accelerator Laboratory, USA
We implemented soft x-ray and UV spectroscopy methods to investigate novel 2D materials with prospective technological applications. My responsibilities included the project planning, feasibility study and successful proposal writing as well as the coordination of the research team during the experiments at x-ray facilities in the USA and Korea.

Post-Doctoral Researcher 07/2017 – 12/2017
European XFEL GmbH, Hamburg Area, Germany
I helped with the commissioning of one experimental end station. We conducted the first successful experiments at European XFEL.

Ph.D. Student 06/2013 – 02/2017
European XFEL GmbH, Hamburg Area, Germany
I performed interdisciplinary research on chemical systems relevant for biological and technological catalysis using x-rays and lasers. My task was to plan, coordinate and perform experiments at research facilities in Europe, USA and Japan. I analyzed large data sets, interpreted, and published results.

M.Sc. Student 01/2012 – 12/2012
ICFO – The Institute of Photonic Sciences, Castelldefels, Spain
I designed and conducted optical pump-probe experiments with high-power femtosecond lasers.

Education

11/2022 – 11/2023: Trainer for Communication and Behavior, ARTOP Berlin
06/2013 – 01/2017: Ph.D. in Physics, Uni Hamburg (magna cum laude)
10/2010 – 12/2012: M.Sc. in physics at TU Darmstadt (final grade 1.8)
10/2006 – 10/2010: B.Sc. in physics at TU Darmstadt (final grade 1.9)
09/2008 – 07/2009: Erasmus Exchange, Universidad de Extremadura, Spain
2006: Abitur, Albert-Schweitzer-Gymnasium Dillingen/Saar