

DR. STEVEN SCHEPANSKI

Data Scientist, Biostatistician and Psychologist

With 6 years' honed expertise, I excel in diverse programming languages and statistical tools for comprehensive data analysis, visualisation, and predictive modelling. My atypical academic journey underscores a genuine passion for pioneering data solutions. Thriving in varied environments, I adeptly communicate insights through numerical representations, showcasing adaptability across interdisciplinary domains. Proficient in transforming intricate numerical concepts into practical, data-driven solutions seamlessly uniting qualitative demand with quantitative results.



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SKILLS

Programming Languages: Python, R, SQL, Matlab | **Data Analytics & Machine Learning:** SPSS, SAS, Excel, TensorFlow/Keras, SciKit-Learn, Pandas, NumPy | **Data Visualisation:** Matplotlib, Seaborn, Plotly, ggplot, Altair, Dash | **Database & Management:** PostgreSQL | **Software Development & Tools:** Git, Bash, Pytest | **Cloud Platforms:** Google Cloud | **Research & Data Capture:** REDCap, SurveyMonkey | **Web Development & Dashboards:** Plotly (Dash), Streamlit | **Awards:** Professional Development Awards (2018, 2019), Research Grants for Early-Career Professionals

PROFESSIONAL EXPERIENCE

Biostatistician

Charité-Universitätsmedizin Berlin, corporate member of Freie Universität Berlin and Humboldt-Universität zu Berlin
Feb-2024 - pres II Berlin, BE, Germany

- Leading independent biostatistical consultation and planning for clinical studies, encompassing study design, sample size estimation, study protocol, and analysis planning (SAP)
- Conducting autonomous analysis and report generation in strict adherence to relevant guidelines
- Collaborating on planning new studies and actively contributing to grant proposals, including estimating sample sizes for external, national, and ethics applications
- Offering statistical guidance across diverse analysis programs, providing methodological support, and advising on publications and statistical revisions, and spearheading leadership and mentorship to colleagues and students contributing to their academic success and fostering proficiency in advanced statistical methodologies
- Demonstrating collaboration and cross-functional engagement within a multidisciplinary team, effectively communicating with non-statistical-stakeholders. Integrating diverse dynamic insights into statistical analyses, ensuring alignment with project objectives and facilitation cohesive cross-functional collaboration

Data Scientist

Massachusetts General Hospital, Harvard Medical School
Jan-2023 - May-2023 II Boston, MA, USA

- Applied advanced bioinformatics to interpret single-cell RNA sequencing data, identifying diverse cell populations and revealing critical gene expression patterns for over 50+ mother-child pairs over multiple time points throughout pregnancy and beyond, identifying key risk factors, predictors, and outcomes during and after pregnancy.

- Led the integration of multiple single-cell RNA sequencing datasets, removing batch effects and ensuring data coherence using tools like Seurat v3 and Harmony. Developed dynamic visualisations and interactive dashboards for collaborative data exploration, enhancing accessibility and interpretability of complex biological insights.
- Supervised, mentored, and provided guidance for 10+ colleagues and students at various academic levels in statistical analyses and methodological planning that boosted project success rate.
- Provided guidance and support to LGBTQ+ individuals, playing a pivotal role in fostering inclusivity.

Project Manager and Associate Editor

Springer Nature Group

Jun-2021 - Dec-2022 | Remote

- Spearheaded cross-functional international projects, ensuring prompt delivery, surpassing cost-saving targets, and upholding rigorous quality standards.
- Orchestrated the optimisation of project and editorial workflows through strategic planning, significantly enhancing overall efficiency.
- Demonstrated adaptability in navigating dynamic challenges, consistently surpassing stakeholder expectations.

Postdoctoral and Doctoral Research Scientist, and master student

Universitätsklinikum Hamburg-Eppendorf

Oct-2017 - Dec-2022 | Hamburg, HH, Germany

- Applied advanced statistical methodologies and A/B testing for impactful data-driven decision-making, ensuring reliable insights.
- Executed robust research strategies for preclinical and clinical studies, aligning with business objectives and regulatory standards. Implemented cutting-edge data acquisition techniques for high-quality datasets.
- Crafted compelling data visualisations, translating complex findings into easily understandable visuals. Developed interactive dashboards for efficient communication across diverse stakeholders.
- Published valuable insights in reputable journals and effectively communicated findings at intl. conferences.
- Collaborated seamlessly with cross-functional teams, including clinical and biostatisticians, integrating clinical insights into data interpretation. Facilitated interdisciplinary discussions to bridge the gap between experimental and clinical research.
- Demonstrated commitment to continuous learning, staying updated on industry advancements and technologies.
- Supervised and provided guidance for 20+ colleagues and students at various academic levels in statistical analyses and methodological planning that boosted project success rate.
- Mentored 5 students, delivering instructions in basic and advanced statistics for medical students, resulting in all students graduating with magna cum laude or better.
- Ghostwrote multiple methods sections of published articles, showcasing expertise in research methodology and scientific writing.
- Provided statistical and methodological guidance/support for applications of over 15 proposals for preclinical experiments, 3 clinical study cohorts, and 5 proposals for national funding agencies, contributing to successful project funding and implementation.

Master Student

Universitätsklinik Essen

Feb-2016 - Apr-2016 | Essen, NW, Germany

- Implemented advanced statistical methodologies to enhance data quality, resulting in efficient management and analysis of large-scale longitudinal datasets.
- Executed the application of survival analysis and time-to-event methodologies in designing and analysing cohort studies, contributing to robust research outcome.
- Demonstrated strong communication skills, fostering effective collaboration, and applied project management proficiency, ensuring streamlined data-related tasks with defined timelines.
- Orchestrated clinical trials with longitudinal framework, adhering to ethical considerations and regulatory standards, ensuring compliant and impactful research.

Bachelor Student

Evangelisches Krankenhaus Alsterdorf gemeinnützige GmbH

Aug-2015 - Oct-2015 | Hamburg, HH, Germany

- Leveraged data analysis to map cognitive patterns, offering insights for informed decision-making.

- Conducted thorough data analysis to diagnose cognitive challenges, optimising treatment strategies for improved outcomes.
- Employed data visualisation techniques to portray and interpret neurological patterns using fTCD and EEG recordings, contributing to comprehensive insights.

Bachelor Student

Universitätsklinikum Hamburg-Eppendorf

May-2015 - Jul-2015 II Hamburg, HH, Germany

- Utilised multiple regression analysis and data-driven optimisation techniques to improve training courses, ensuring the development of healthcare staff.

Bachelor Student

Universität Bremen

Jan-2014 - Dec-2014 II Bremen, HB, Germany

- Employed a range of statistical methods to optimise diagnostic processes, leading to higher diagnostic accuracy.

Bachelor Student

Knappschaftskrankenhaus Dortmund

Oct-2013 - May-2014 II Dortmund, NW, Germany

- Contributed to department-wide data analysis initiatives, enhancing the accuracy and efficiency of neurological assessments.

EDUCATION

Universität Hamburg

Doctor of Philosophy (PhD) specialised in Systems Neurosciences and Clinical Data Science

Aug-2020 II Hamburg, HH, Germany

Dissertation: 'The role of maternal microchimerism and prenatal stress for perinatal brain development and cognition' (*summa cum laude*)

Universität Trier

Master of Science (M.Sc.) in Psychology specialised in evaluation, applied diagnostics, and multivariate statistics

Sep-2017 II Trier, RP, Germany

Universität Bremen

Bachelor of Science (B.Sc.) in Psychology specialised in applied statistics methodologies for clinical validations

Aug-2015 II Bremen, HB, Germany

CERTIFICATES

Data Science Bootcamp, SPICED Academy, Berlin, Germany (Sep-2023 - Nov-2023); SQL for Data Science, IBM DB0201EN (Aug-2023 - Nov-2023); Data Science for Life Sciences, Harvard University, Boston, MA, USA (Jan-2023 - Mar-2023); Molecular Biology/ Bioinformatics, University of Hamburg, HH, Germany (Oct-2017 - Sep-2019)

OTHERS

Publications: Published over 10 articles in prestigious journals, showcasing profound analytical abilities.

Contributions include articles in esteemed publications such as Nature Communications, EMBO Reports, and World Journal of Pediatrics.

Conferences & Talks: Delivered scientific presentations at renowned international meetings, including the FENS, Society of Neuroscience, Keystone Symposia, Sex Differences in immunity, European Society of Reproductive Immunology.

Languages: German (native), English (fluent), French (Basic), Spanish (Basic)