Dr. Fabian Wunderlich – Short CV

Research Interests

Methods	Data Analytics in Sports (e.g. Big Data Analysis, Machine Learning Artificial Data, Analysis of Social Media and Positional Data, Complex Inferential Statistics, Statistical Modelling and Programming)
Topics	Sports Forecasting, Sports Betting, Betting Odds, Performance Analysis, Randomness in Sports, Psychological Aspects in Sports Games (Home Advantage, Penalties)

University Education

09/2017 – 03/2022 **Dr. rer. nat.**
German Sport University Cologne
Supervisor: Prof. Dr. Daniel Memmert
Final grade: summa cum laude

Title of the Dissertation: „Sports forecasting – Current applications in sports science and moving towards Big Data.“

10/2010 – 09/2013 **Master of Science: Business Mathematics**
University of Cologne
Final grade: 1,3

Title of the Master Thesis: „Ein Simulationsmodell zur Schätzung von Mannschaftsstärken und Vorhersage von Fußballergebnissen.“

10/2007 – 09/2010 **Bachelor of Science: Business Mathematics**
University of Cologne
Final grade: 1,9

Title of the Bachelor Thesis: „Können Poisson-Modelle die Ergebnisse einzelner Fußballspiele besser vorhersagen als Experten an Wettbörsen?“

Current Position

Since 09/2017 **Senior Lecturer**
German Sport University Cologne
Institute of Exercise Training and Sport Informatics

- Writing of scientific publications
- Writing of research proposals (e.g.. DFG, BMBF)
- Teaching and Supervision

Five most important publications [Impact Factor]
(h-index 15, i10-index 19)

Wunderlich, F., & Memmert, D. (2020). Are betting returns a useful measure of accuracy in (sports) forecasting?. *International Journal of Forecasting*, *36*(2), 713-722., https://doi.org/10.1016/j.ijforecast.2019.08.009 [IF: 7.1]

Wunderlich, F., Biermann, H., Yang, W., Bassek, M., Raabe, D., Elbert, N., Memmert, D. & Garnica Caparrós, M. (2025). Assessing machine learning and data imputation approaches to handle the issue of data sparsity in sports forecasting. *Machine Learning*, *114*(2), 1-28. [IF: 4.3]

Wunderlich, F., Weigelt, M., Rein, R., & Memmert, D. (2021). How does spectator presence affect football? Home advantage remains in European top-class football matches played without spectators during the COVID-19 pandemic. *Plos one*, 16(3), https://doi.org/10.1371/journal.pone.0248590 [IF: 3.2]

Brinkschulte, M., **Wunderlich, F.**, Furley, P., & Memmert, D. (2023). The obligation to succeed when it matters the most–The influence of skill and pressure on the success in football penalty kicks. *Psychology of Sport and Exercise*, *65*, 102369. [IF 4.8]

Wunderlich, F., & Memmert, D. (2021). Forecasting the outcomes of sports events: A review. *European Journal of Sport Science*, 21(7), 944-957., https://doi.org/10.1080/17461391.2020.1793002 [IF: 4.1]