ROBERT W. SCHUSTER

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EDUCATION

The University of Queensland *Brisbane, AUS*
PhD – Biomechanics *10/2018 – 03/2023*
- *Thesis:* Establishing the relationship between foot form and function
- Supervised by A/Prof Luke Kelly and Prof Andrew Cresswell
- Dean's Award for outstanding contribution to the discipline (nominated)

Technical University of Munich *Munich, GER*
MSc – Diagnostics & Training *09/2014 – 09/2017*
- Focus on applied biomechanics and exercise physiology testing
- *Thesis:* High-density electromyographic identification of neuromuscular determinants of drop jump performance across varying drop heights

Technical University of Munich *Munich, GER*
BSc – Scientific Principles of Sports *09/2010 – 06/2014*
- *Thesis:* Influence of electrical stimulation applied to the quadriceps femoris on height of a subsequent squat jump in context of postactivation potentiation

PROFESSIONAL EXPERIENCE

Australian Catholic University *Brisbane, AUS*
Research Assistant *05/2022 – 12/2022*
- Biomechanics and data analysis support for various research projects
- Developed R shiny apps for the analysis of performance assessment and sleep tracking data

VALD Performance *Brisbane, AUS*
Industry Placement *05/2022 – 07/2022*
- Explored combining load cell and IMU data for dynamic strength assessment with the DynaMo handheld dynamometer

The University of Queensland *Brisbane, AUS*
Graduate Teaching Assistant *07/2019 – 11/2021*
- Taught Biomechanics
- Helped create online teaching material

Technical University of Munich *Munich, GER*
Scientific Staff Member *08/2017 – 08/2018*
- Department of Biomechanics in Sports (Prof Ansgar Schwirtz)
- Involved in various research projects with high performance (DSV) and industry partners (eGym & BMW)
- Taught Biomechanical Competencies and Methods in Kinesiology

Olympic Centre Bavaria *Munich, GER*
Performance Diagnostics *05/2016 – 08/2018*
- Performed strength and speed diagnostics of national and international level athletes from various Olympic disciplines

Technical University of Munich *Munich, GER*
Student Assistant *05/2016 – 08/2017*
- Department of Biomechanics in Sports (Prof Ansgar Schwirtz)
- Collected, processed and analysed data for a research project examining cross-country roller-ski skating technique of international level biathletes and cross-country skiers

ABOUT ME

I am naturally curious and enjoy the process of investigating challenging questions as well as solving complex problems.

I have extensive experience collecting, processing, analysing and communicating research data, and have applied these skills across a wide range of fields concerned with human health and performance.

SKILLS

Programming Languages

Skill	Level
R	Expert
MATLAB	Expert
Python	Intermediate
GitHub	robertwschuster

Data Acquisition and Analysis

Skill	Level
3D motion capture	Expert
Dynamometry	Expert
Electromyography	Expert
OpenSim	Intermediate
Statistical modelling	Expert

Beginner	Intermediate	Expert

LANGUAGES

German Native
English Near native
Spanish Fluent
French Basic knowledge

SOCIETIES

Australian and New Zealand Society of Biomechanics

PERSONAL INTERESTS

Playing rugby union, strength training, running, cooking, watching movies, and reading (mostly non-fiction/popular science)