ROBERT W. SCHUSTER

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Brisbane, AUS 📍

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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

The University of Queensland
Brisbane, AUS

Research Assistant
02/2023 – 06/2023

- Involved in research with Prof Glen Lichtwark investigating ground reaction force prediction from markerless 3D motion tracking

Australian Catholic University
Brisbane, AUS

Research Assistant
05/2022 – 12/2022

- 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 and helped create online teaching material

Technical University of Munich
Munich, GER

Scientific Staff Member
08/2017 – 08/2018

- Involved in 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

- Involved in research examining 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

R	
MATLAB	
Python	

GitHub   robertwschuster

Data Acquisition and Analysis

3D motion capture	
Dynamometry	
Electromyography	
OpenSim	
Statistical modelling	

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)