PhD position – Investigating peripheral vision usage in sports and driving (100%, 3+1 years, m/f/d)

u^b

As of January 1st 2025 (or by mutual agreement), the Department of Movement and Exercise Science at the Institute of Sport Science (ISPW) of the University of Bern will seek a PhD student for the Starting Grant project led by Prof. Dr. Christian Vater.

Introduction

You will be part of our young team working on the Swiss National Science Foundation (SNSF) Starting Grant project entitled "Mechanisms of peripheral vision in complex decision making" (TMSGI1_211220 / 1). In the first phase, we focus on mechanisms behind the use of peripheral vision in experimentally controlled settings in our Virtual Reality laboratory. In the second phase, we investigate if these mechanisms can be trained to enhance decision-making processes in football and transferred to other domains like car driving.

We offer:

- Integration in an interdisciplinary environment at the Institute of Sport Science in Bern
- Laboratories with a 3D cave projection, a 3D sound system, motion- and eye-tracking
- Possibility to gain teaching experience (Bachelor seminar)
- 6-month research stay at the Swedish National Road and Transport Research Institute (VTI)
- Participation in both national and international research colloquia and conferences
- Yearly research symposium with international guests from different sports domains
- Salary according to the SNSF guidelines (brutto salary of 55'000 CHF per year)
- Free participation in the Unisport program

Your tasks:

- Conducting the dissertation project
- Plan and execute studies on the perception-action coupling of football players and car drivers
- Recording and analyzing motion- and eye-tracking data, as well as driving behavior.
- Programming of data analysis routines (in Python, Matlab or R)
- Coordinating studies with the Swiss Council for Accident Prevention (BFU) and the Swedish National Road and Transport Research Institute (VTI)

Your profile:

- Very good university degree (Master), preferably in sport science, psychology, computer science or related fields (according to the doctoral regulations, only persons with at least "magna cum laude" (good) or with a minimum grade 5 in their Master's degree can be admitted)
- High interest in the research topic
- Very good English language skills (especially in writing)
- Good knowledge of empirical research methods
- Open-minded person with a passion for working collaboratively in teams
- Good communication and presentation skills

Other skills that are beneficial for the project:
- Experience with analyzing behavioral or eye-tracking data
- Knowledge about Virtual Reality animations and/or experience with driving simulators
- Experience with analyzing large datasets

Are you interested?

We look forward to receiving your online application including the following documents (preferably in one PDF file): (1) *Letter of motivation*, (2) *CV*, (3) *full academic records* (such as Bachelor's and Master's degrees), (4) *short statement of research interests*, (5) (*publication list*).

The application deadline is **15 October 2024**.

Your application or any questions regarding the position can be sent to Prof. Dr. Christian Vater (christian.vater@unibe.ch).

Please find information about the University of Bern here and our working group here.