24.03.2020, Interdisciplinary Project

Smart Devices in Skiing

The trend towards digitalization is also affecting sports equipment. In mountain biking, for example, there are intelligent suspensions that adapt to the ambient conditions and provide feedback to the rider. In running sports, shoe insoles are available, that can measure the pressure distribution and display it in real time on the mobile phone. This allows targeted work on the running technique. The professorship for sports equipment and sports materials would like to present a new ski concept next year at the world's largest multi-segment fair in the sports business, the ISPO Munich. The related invention is currently in the patenting process, which is why more detailed information can only be given after signing a non-disclosure agreement. The tasks within the Interdisciplinary Project are formulated in general terms:

- Development of an app incl. definition of the communication between ski and handy
- Development of a feedback system between ski and skier

The project can be started immediately. A group of two persons is desired. We recommend as preparatory/accompanying lecture and exercise:

- Lecture „Sports Engineering“ (LV-Nr. 0000001975, Prof. Senner, 2 SWS)
- Exercise „Sports Engineering“ (LV-Nr. 0000004426, Valentin Wohlgut, 2 SWS)

If we have aroused your interest, please contact us:

- Patrick Carqueville (patrick.carqueville@tum.de)
- Valentin Wohlgut (valentin.wohlgut@tum.de)