Professor of Mobile Health Systems

The Department of Health Sciences and Technology (www.hest.ethz.ch) at ETH Zurich invites applications for the above-mentioned position.

Emerging and industrialised nations alike face challenges with rapidly ageing populations and rising rates of chronic illnesses and conditions. Late referral to a doctor and high co-morbidity lead to exploding health care costs and reduced quality of life. The development and rapid evolution of smart phones and mobile/wearable sensor technologies as well as the increased computational power and functionality of these devices offer solutions to these pressing challenges. This has enabled the development of advanced medical decision support systems, diagnostic screening and continuous patient self-monitoring at the point-of-care. The aim of this professorship is to create an integrated approach to mobile health research, considering all relevant aspects from sensor development, system integration, and data collection to data analysis, interpretation, and treatment. Usability and clinical validation will be equally important. Targeted applications will be monitoring of ageing populations and individuals, as well as chronic disease monitoring, prevention, and treatment delivery. Collaborations with local and international clinics and medical experts are expected. Considering the global importance of mobile health, collaboration with partners in emerging countries is encouraged.

Successful candidates demonstrate expertise in the areas of sensor and device development, signal/information processing, machine learning and information retrieval from big data. Therefore, a strong background in electrical/mechanical/micro-engineering and computer science (or related) is required. Considering the translational nature of the position, experience in medical and human-factors engineering and collaboration with clinicians and medical institutions across the globe is desired. The new professor is expected to perform both basic and applied research, including clinical validation.

Additional prerequisites are a strong motivation and an undisputable commitment to teaching. In general, at ETH Zurich undergraduate level courses are taught in German or English and graduate level courses are taught in English.

Please apply online: www.facultyaffairs.ethz.ch

Applications should include a curriculum vitae, a list of publications and projects, a statement of future research and teaching interests, and a description of the three most important achievements. The letter of application should be addressed to the President of ETH Zurich, Prof. Dr. Lino Guzzella. The closing date for applications is 15 August 2018. ETH Zurich is an equal opportunity and family friendly employer and is responsive to the needs of dual career couples. We specifically encourage women to apply.