Undergraduate co-op, visiting, and graduate students and postdoctoral Fellowship positions available:

Neuromuscular Control & Biomechanics Laboratory (NCB-Lab: www.ncbl.ualberta.ca):
Relying on engineering means and interdisciplinary collaborations, NCB-Lab’s team aims to positively impact prevention and rehabilitation by gaining a better understanding of the neuromusculoskeletal mechanisms of human movement, outcome measures for movement and performance assessment, and designing and evaluating advanced assistive technologies with the goal of enhancing the quality of life of those affected by movement impairments.

The Position:
Qualified applicants are invited to apply for undergraduate co-op student, visiting student, MSc student, and PhD student, and Postdoctoral fellowship positions to pursue new and creative research ideas in the development and implementation of wearable wireless technology for remote and autonomous health monitoring. Successful candidates will have strong collaboration and coordination skills to work directly with NCB-Lab colleagues at multiple levels (e.g., staff, graduate and undergraduate students, postdoctoral fellows), biomedical industry, rehabilitation centres, athletic teams and other research teams across the country to successfully contribute this research project.

Qualifications:
- For undergraduate students, current enrollment in an engineering undergraduate program is required.
- For MSc, PhD, or postdoctoral fellow roles, completion of a BSc, MSc, and/or PhD, respectively, is required. As well, at least one of those degrees must be in mechanical, biomedical, electrical, or computer engineering.

Preferred Assets:
- Interest and experience in signal processing, machine learning, wearable instrumentation design, biomechanics, robotics, bio-mechatronics and/or physiological experimentation.
- Interest and experience in interdisciplinary and translational research in collaboration with health scientists, healthcare system, and biomedical industry.

Responsibilities:
- Conducting research in the abovementioned fields
- Establishing and maintaining communication and coordination with colleagues and research collaborators
- Contributing to other research and development projects in NCB-Lab
- Writing research grant or scholarship applications, manuscripts for publication, presentations, and reports
Learning opportunities:
In addition to the program-related coursework, the successful candidates will work closely with their supervisor to create a learning and development plan and attend professional such as research ethics and integrity, and project management. They will also be trained in relevant engineering domains, including biomedical instrumentation design, biomedical signal processing, human motion biomechanics, bio-mechatronics, machine learning, and development and validation of heuristic healthcare solutions.

Application Procedure:
Interested candidates may send their questions or their CV, together with a cover letter and the names of three references to Dr. Hossein Rouhani (he/him) (hrouhani@ualberta.ca), the Director of NCB-Lab (https://www.ncbl.ualberta.ca/hossein-rouhani).

For more information on admissions and requirements, professional development, medical benefits, cost of living, and childcare for graduate studies or post-doctoral fellowships at the University of Alberta, visit: https://www.ualberta.ca/graduate-studies/index.html or https://www.ualberta.ca/research/research-support/post-doctoral-office/index.html.

The University of Alberta is committed to an equitable, diverse, and inclusive workforce. We welcome applications from all qualified persons. We encourage women; First Nations, Métis and Inuit; members of visible minority groups; persons with disabilities; persons of any sexual orientation or gender identity and expression; and all those who may contribute to the further diversification of ideas and the University to apply.