M.Sc. and Ph.D. Positions in Computer Science and Mechanical Engineering
University of Idaho, Idaho Falls Campus

POSITION DESCRIPTION

Computer Science Position: The research focus is on the implementation of machine learning for modeling sequential time-series data with applications in biomedical science and robotics. Aspects of the research project include hierarchical modeling of generic human movements, probabilistic modeling and density estimation in sequential data, adversarial data models for classification, defining metrics for evaluation of human movement consistency. Specific applications include: monitoring and evaluation of patient performance during physical therapy sessions, transferring skills to robots from human demonstrations by generalization from multiple skill examples.

Mechanical Engineering Position: Candidates will be responsible for conducting research in the broad area of design and manufacturing, cyber-physical systems, data-driven decision making, and sustainability; particularly, designing and controlling bioenergy production processes, such as pyrolysis and hydrothermal liquefaction.

PREFERRED SKILLS
- Background and interest in Machine Learning and Artificial Intelligence disciplines
- Software packages:
  - Computer Science – Python, Tensor Flow, Theano, Caffe libraries
  - Mechanical Eng. – Python and/or MATLAB, SolidWorks, Aspen Plus, and LabVIEW
- Ability to work independently and in a team, and strong communication skills
- Admission from the College of Graduate Studies at the University of Idaho

DURATION
Two years for M.Sc. and four years for the Ph.D. program.

SUPPORT
Department support will be granted based on the qualifications and experience.

STARTING DATE
Spring 2018, the positions will remain open until filled.

CONTACT
Interested individuals who have any questions are encouraged to contact Drs. Vakansi and Mirkouei at vakanski@uidaho.edu and amirkouei@uidaho.edu or (208) 757-5420.