HES-SO University of Applied Sciences and Arts Western Switzerland-Geneva is recruiting for the Geneva School of Business Administration in International Business Management department a position of:

**An assistant UAS (PhD student) in applied mathematics and scientific computing**

**Limited duration contract of 12 months, renewable**

**full-time (100%)**

**Topic:** Digital twins/machine learning for laser manufacturing. The goal is to implement a digital twin for laser-based additive manufacturing. A physical model will be used to produce a large amount of data, which will be learned by a neural network. Given online measurements, an inverse method will be used to identify the missing physical parameters. The digital twin will ultimately help the end-user to select the laser process parameters, based only on a few laser passes.

In a dynamic academic environment, the position allows
- To work on a PhD project in the field of machine learning with application to laser manufacturing
- Develop skills in the full range of teaching and/or research activities of the teachers
- To demonstrate autonomy and initiative in a variety of activities

**Mission:**
- Participate to research projects with the goal of obtaining of PhD degree.
- Assist a professor in his/her teaching activities
- Prepare, proctor and grade exams

**Profile:**
- Master degree in applied mathematics, or computational science and engineering, or equivalent
- Strong interest for programming, algorithmic, and numerical analysis
- Written and spoken English skills
- Ability to work in a team
- Flexibility, autonomy and organizational skills

**Characteristics of the position:**
- The duration of this UAS contract is for 12 months, renewable up to four times
- The salary rate for an assistant UAS holding a Master degree corresponds to a class 9 – annuity 2
- The PhD candidate will work both at the HEG-Genève and at EPFL. She/he will be registered to the doctoral school of mathematics at EPFL. The candidate will be supervised by both Prof. Alexandre Caboussat (HEG, http://campus.hesge.ch/caboussat ) and Prof. Marco Picasso (MATH, EPFL, http://people.epfl.ch/marco.picasso , http://asn.epfl.ch ). PhD thesis will be issued by EPFL
- The position is subject to admission to EPFL doctoral program of mathematics

**Deadline for applications:**  June 30th, 2021 (later applications will be considered until application is filled)

**Starting date:** September 1st, 2021 (but flexible)

**Work place:** Campus Battelle, 1227 Carouge and EPFL

The HES-SO Geneva/HEG is an equal opportunity employer.
Please submit your application (CV, cover letter, copies of diplomas, most recent grades, and the contact information of two references) by email only to alexandre.caboussat@hesge.ch. Incomplete applications will not be taken into consideration. Please contact Prof. Alexandre Caboussat (alexandre.caboussat@hesge.ch) for any additional information.

Information regarding the job description, salary and working conditions can be requested from the HR department: raquel.pillco-vilchez@hesge.ch, tél. : +41 22 558 64 87.