PhD position on soft robotics at Inria Lille, France

Topic:
Soft robots are rightly able to adjust their shapes and flexibilities to suit the task and the environment. Due to the infinite number of degree of freedom, the modeling and control of soft robot with precision are still an open problem in scientific research.

Job Description:
Due to special requirements in the different scenarios, different types of actuators and sensors measuring the robot position and parameters should be integrated in the soft robot. The type of actuators and sensors and where they are mounted will determine the controllability and observability of the designed soft robot. The job of the candidate is to develop new algorithms to facilitate the design of soft robots by pre-checking those properties. Finite-time element (FEM) and Model order reduction (MOR) will be applied.

Skills:
The candidate must have a master in Robotics or Automatic Control or Computer Science or a related field. French is necessary but the fluency in English (writing/speaking) is mandatory. Knowledge of C/C++, Python is a plus.

Additional information:
This 3 years' scholarship is financed by I-SITE project, and will be started before 1 December 2018. The candidate will work in Defrost team (https://team.inria.fr/defrost/) of Inria Lille.

Scientific contact:
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