Discovering the impact of “learning by doing” in programming and STEM education exploiting Machine Learning techniques

Mots clés :
- Directeur de thèse : FLORENCE ROSSANT
- Co-encadrant(s) :
- Unité de recherche : Laboratoire d'Informatique Signal et Image Electronique et Télécommunication
- Ecole doctorale : École Doctorale Informatique, Télécommunications, Électronique de Paris
- Domaine scientifique principal : Sciences et technologies de l'information et de la communication

Résumé du projet de recherche (Langue 1)

Nowadays lots of social attention is set on how important it is to learn programming and STEM (Science, Technology, Engineering and Mathematics), even since youth. Different approaches of teaching STEM and coding are used: two of the most adopted are based on physical manipulation thanks to robots or programmable objects or on exploiting digital/virtual environments. At the same time, few works explore which kind of cognitive-psychological impacts these kind of learning interactions can cause and how students feel during the learning experience. In this project, we want to further explore the impact of “learning by doing” (or active learning) in computing and STEM education exploiting Machine Learning techniques.

Informations complémentaires (Langue 1)

Contacts: florence.rossant@isep.fr, patrick.wang@isep.fr, ilaria.renna@isep.fr Partnership between the University Sacro Cuore Milan (Italy) and ISEP (Institut Supérieur d'Électronique de Paris).