Human and animal movements are still utterly astonishing when compared to robots. The AMARSi Project aims at bridging this gap.

Research will include
- analysis and comparison between human motor control and robotics
- development of damage-robust, safe and fast compliant mechanics
- exploitation of morphological computation
- advancing algorithms for unsupervised, reinforcement and imitation learning
- dynamical and neural models in control architectures across cognitive levels
- unified framework for locomotion and manipulation behaviour

The results will demonstrate rich motor skills on the iCub humanoid robot and on the quadruped Cheetah.

Robots will have a wider use and higher impact thanks to their more dexterous motion. The compliant and natural movements will make them blend into everyday routines, make them safe and psychologically acceptable.

http://www.amarsi-project.eu