

# Team

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DEMAR research interests are centered on the human sensori motor system, including muscles, sensory feedbacks, and neural motor networks.

Indeed, DEMAR focuses on two global axes of research:

- Modelling and controlling the human sensori motor system.
- Interfacing artificial and natural parts through implanted neuroprosthetic devices.

The main applied research fields are then:

- Quantitative characterization of the human sensori motor system firstly for motor disorders diagnosis and objective quantification, and secondly in order to help the design of neuroprosthetic devices.

- Restoring motor or sensitive functions through implanted functional electrical stimulation (FES) and neural signals sensing.

DEMAR is thus a pluridisciplinary team whose members work on complementary disciplines such as automatic control theory, microelectronics, industrial informatics, neurophysiology, biomechanics and advanced signal processing...

DEMAR also works in close relations with rehabilitation centers, surgeons, medical doctors and industrial partners (see collaborations).