

Phd Position (3 years)

Location: University of Technology of Compiègne, France

For the project "Virtual IMC", a PhD Position is open at the research unit Biomechanics and Bioengineering (UMR-CNRS 6600) (www.utc.fr/umr6600) at the University of Technology of Compiègne from October 2008 to September 2011.

The project is dedicated to the monitoring and computed-aided diagnosis of the cerebral palsy (CP) in children (IMC in French). The aim of this project is to locate the spasticity and simulate its impact on the bone structures. To achieve this aim, we propose to compute a "Virtual IMC", being a parameterized numerical musculo-skeletal model. This model takes into account the specificity of the patient allowing the clinicians to test orthopedic solutions and simulate their potential consequences.

This PhD-project is an interdisciplinary project in relation with rehabilitation centers and orthopedics surgeons.

This project includes complex mechanical structure modeling with an identification and optimization procedure.

Qualifications:

- Strong background in mechanics (solid bodies and FEM method)
- Background in biomechanics
- Ability to collect and analyze experimental data
- Experience with software for computational mechanics (MSC.ADAMS, MSC.PATRAN)
- Excellent oral / written communication in English and French

All information the University of Technology of Compiègne and the Compiègne area can be found respectively under www.utc.fr and www.compiègne.fr

Please send your applications including your CV (including a publications list and a summary of the previous research experience, a cover letter, and a recommendation letter per post or email as soon as possible).

to:

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