ABLE is a low-cost, lightweight and easy-to-use robotic exoskeleton that allows spinal cord injured people to walk again. It has been developed by the ETSEIB research group in Biomechanical Engineering (biomec.upc.edu) and will reach the market through an spin-off. We are looking for motivated students with interest in new technologies to develop the commercial prototype. More info at: www.caiaimpulse.com/en/projects/-/caiaimpulse/project/ABLE

BACHELOR/MASTER THESIS
“Miniaturization of the exoskeleton electronics and development of a battery management system”

Description
At the moment, the electronics and the power supply of the exoskeleton are placed in a backpack that carries the patient when walking. The objective of this work is twofold: on the one hand, to miniaturize the electronics (*); and on the other hand, to develop a system that manages the battery charge.

Requirements
• Bachelor or Master student in Telecommunications Engineering, Electronic Eng., Industrial Eng. (Electronic or Automatic specialization) or similar
• Maker spirit, DIY
• Experience with microcontrollers
• Experience with LiPo or Li-ion batteries will be appreciated
• Proactive, dynamic and entrepreneurial profile

Contact: send CV and motivation letter to Alfons Carnicero (alfons.carnicero@upc.edu) before 31st January

* Together with a specialized company Supported by:

CREB
UPC
Biomedical Engineering Research Centre

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