



Universidad de Valladolid

PRE-DOCTORAL RESEARCH FELLOW IN ARTIFICIAL INTELLIGENCE AND MOVEMENT ANALYSIS SCIENCES

<https://rehabot.eu>



Universidad de Valladolid

We are seeking a highly motivated and talented person to join our research team as a Predoctoral Research Fellow. The position is part of the exciting research project "*RehaBot: Smart assistant to complement and assess the physical rehabilitation of children with cerebral palsy in their natural environment*". For more info on the project visit: <https://rehabot.eu>.

The successful candidate will pursue a **Ph.D. at the University of Valladolid (Spain) in the field of Artificial Intelligence**, and more specifically in the context of Biomedical Engineering and Physical Rehabilitation. They will develop a strong knowledge in deep learning, programming skills in Python, and an expertise in computer vision and wearable technologies for three-dimensional movement tracking and analysis in health and pathology.

RESPONSIBILITIES

- Conducting research activities related to the project objectives.
- Implementing algorithms and models using Python and other programming languages.
- Interacting with patient's families for data collection and prototype piloting.
- Writing and presenting research results in academic conferences and journals.
- Commit to pursue the Ph.D. by compendium of publications in the research group, which may be defended after the publication of e or more scientific articles (3 to 5 years).

REQUIREMENTS

- Master's degree (demonstrate a minimum of 300 ECTS credits in higher education, in the following months) in Engineering (Biomedical Eng., Telecommunications Eng., Electrical Eng.), Computer Science, Mathematics, or related fields.
- Excited to work in an interdisciplinary team and to collaborate with teams abroad.
- Medium to strong programming skills in Python or demonstrate rapid programming learning ability.
- Basic to medium knowledge on Machine Learning and/or Deep Learning.
- Fluency in English (writing and speaking).
- Excellent communication and organizational skills.
- Ability to work independently and as part of a team.

PREFERRED

- Experience in research projects related to Machine Learning / Deep learning.
- Experience in deep learning frameworks (e.g., TensorFlow, PyTorch)
- Experience in Python and other relevant languages or tools for the project (C#, Matlab)
- Experience in web development (HTML, CSS, Django)
- Experience in mobile app development (iOS, Android) and chatbot development (API Telegram)
- Certified English language competency (B2, C1, C2).

DATES

- The incorporation of the candidate to the job would take place as soon as possible, after administrative processing (1 month from the final resolution). The candidate would apply for a [PhD in Information Technology and Telecommunications](#) for the next academic year (2022-23).

WHAT WE OFFER

- The University of Valladolid is ranked among the top universities in Spain, with affordable tuition fees. Valladolid is a historical and well-connected full of life city, relatively small and very safe. It is also known to be one of the best places to learn Spanish.
- During your PhD you also can apply for research stays in collaborating institutions (University of Applied Sciences and Arts Western Switzerland), located in the canton of Valais, one of the most beautiful and enjoyable parts of Switzerland.

CONTRACT DETAILS AND HOW TO APPLY

The position is full-time and initially for 2 years, with the possibility of extension based on performance and funding availability. The salary will be commensurate with experience and qualifications (18K-22K gross yearly).

To apply, please submit your CV, cover letter, and recommendation letters to mario.martinez@uva.es and cristina.simon@hevs.ch. We will review applications as they are received, and the position will remain open until filled.



Universidad de Valladolid



Grupo de Investigación: Fisioterapia pediátrica y neurológica



CENTRO INTEGRAL DE REHABILITACIÓN



RehaBot: Smart assistant to complement and assess the physical rehabilitation of children with cerebral palsy in their natural environment. Funded by the Ministry of Science and Innovation of Spain (PID2021-124515OA-I00)