RESEARCHER IN PHYSICS-BASED CHARACTER ANIMATION

JOB DESCRIPTION

Artanim (http://artanim.ch/) is looking for a researcher in Physics-based character animation. This position is available at 100%, starting anytime between January and June 2024. We offer at least a 3-year position, with a yearly gross salary ranging between CHF 85'000 and 95'000 depending on experience.

The successful candidate will work using Mujoco and Unity3D to develop, test and evaluate physics-based interactive animation methods in Virtual Reality scenarios involving human-character cooperation in the context of an Horizon European research project called "Presence". Her or his duties and responsibilities will be mainly:

- The development of physics-based interactive animation controllers for different scenarios.
- The comparison of different strategies to train humanoid controllers.
- Helping to test these in virtual reality behavioural studies involving human-character interaction in cooperative scenarios.
- Contribution to publish the research results.

WORKING ENVIRONMENT

The position is available within the Artanim Foundation. The foundation has many years of experience in R&D related to VR/AR, real time interactive and animation, and motion capture applications from different technologies. It also has a unique track record in converting these technologies in high quality, multi-user VR experiences. The applicant will join a modern R&D lab of moderate size equipped with cutting-edge motion capture technologies.

Artanim was founded in 2011 and is a non-profit research institution dedicated to the promotion and development of motion capture technologies in the medical and virtual reality fields. The offices are located in Geneva (Switzerland), an international city which provides an outstanding quality of life and opportunities all around the year.

PROFILE OF THE CANDIDATE

The candidate has a PhD or equivalent experience on physics-based character animation or a related field, and is at ease with topics such as real-time 3D character animation, computer graphics, mathematics and machine learning.

Essential:

- A PhD degree, or equivalent experience of R&D in Computer Science, Engineering, Mathematics or equivalent
- A proven track record in physics-based character animation

Desired:

- Experience using Mujoco
- Experience programming in C, C++ or C#
- Experience in machine learning or statistical data analysis using Python

Good to have:

- Experience using environments for deep reinforcement learning such as DeepMind's Control suite, Nividia's Isaac Gym or Unity's ML-Agents
- Experience using Unity3D or solutions in modern game engines such as Unreal/CryEngine/etc.
- Publications in relevant conferences or scientific journals
- Experience with optical motion capture systems and software (body, face and/or fingers capture), preferably Vicon
- Good interpersonal communication and collaboration skills
- Good spoken and written English
- Swiss national, European citizen or holder of permit B / C / G

HOW TO APPLY

Candidates should send:

- A one page CV in English. It should include a short list of relevant projects or publications (or a link to a personal web detailing those).
- A short cover letter in English explaining why you are interested in this position together with the name of two people who have worked with you (a supervisor, a co-author, a colleague) that we may contact.

The compiled material should be sent in PDF format to Dr. Caecilia Charbonnier, Research Director, caecilia.charbonnier@artanim.ch and Dr Joan Llobera joan.llobera@artanim.ch

Please feel free to get in contact in case with your questions. For more information about Artanim, please refer to www.artanim.ch