

POSTDOC RESEARCHER IN PHYSICS-BASED CHARACTER ANIMATION

JOB DESCRIPTION

Artanim (<http://artanim.ch/>) is looking for a postdoc researcher in Physics-based character animation. We offer a full-time, 4-year position, starting in the fall of 2024 or early 2025, a Swiss competitive salary and options to become a researcher in a permanent position.

The successful candidate will have the following responsibilities:

- To develop and test new methods for the control of virtual humanoids in Mujoco, using primarily deep reinforcement learning methods but also, within the duration of the project, open to other strategies.
- Collaborate with other researchers to test these in virtual reality behavioural studies involving human-character interaction in cooperative scenarios. This will include exploring the impact of the virtual humanoids in terms of human attention, curiosity and learning, in collaboration with neuroscience and psychology researchers at the University of Geneva.
- Publish the results of your research at relevant conferences or journals.

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 into 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 and a growing research team exploring the use of virtual humanoids in VR experiences.

Artanim was founded in 2011 and is a non-profit research foundation dedicated to the promotion and development of motion capture technologies in the medical and virtual reality fields. The offices are located in Meyrin (Switzerland) near Geneva, 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, robotics or a related field, and is at ease with topics such as real-time 3D character animation, mathematics and machine learning.

Essential:

- A PhD degree, or equivalent experience of R&D in Computer Science, Engineering, Mathematics or equivalent.
- Experience in machine learning, humanoid control and/or robotic simulations.

Desired:

- Experience using Mujoco.
- Experience using JAX.
- Publications in relevant conferences and journals.

Good to have:

- Experience in social robotics.
- Experience using Nvidia's Isaac Gym.
- Experience in optical motion capture (body, face and/or fingers capture).
- Experience using Unity3D or solutions in modern game engines such as Unreal/CryEngine/etc.
- 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

Don't hesitate to reach out to us with any questions you might have. For more information about Artanim, please refer to www.artanim.ch