Council of Coaches

Context:

The GRETA/VIB platform is developed at CNRS-ISIR (Pécune et al, 2014). It simulates virtual characters able to communicate with humans in real-time. It is endowed with socio-emotional capabilities. The control of the character is done through two specific languages at the communicative intention level and at the multimodal behavior one. The platform includes several tools to create multimodal behaviors.

The GRETA/VIB platform is used within the European Horizon-2020 project Council of Coaches which aims to develop a tool in which virtual embodied coaches form a team of experts that can discuss amongst themselves and with the user how the user could improve his healthy lifestyle behaviors. The project combines state of the art 3D Virtual characters with language and reasoning technology and applies this to the area of lifestyle and behavior change coaching.

Job Description:

We are looking for an engineer knowledgeable in 3D virtual environment. S/he will participate to Council of Coaches project. Her/his role will be:

- Port the Greta/VIB platform onto Android mobile. The Greta/VIB platform is written in java and is integrated within Unity3D which is compatible with Android. It requires developing the Server-Client connection between Greta/VIB (server) and Unity (Client).
- Similarly, port the GRETA/VIB platform onto VR headset
- Integrate software modules within the VIB/Greta platform and/or within a bigger software system developed within the H2020 project Coach Council.
- Participate to developers meetings (online and on site) of the H2020 project Coach Council

Profile: Engineer in computer science, Master, PhD

Pre-requisite:

- Programming languages and standards: Java, C#, XML
- Communication protocols: ActiveMQ, Thrift
- VR and 3D engines: Unity3D, VR middlewares for Unity3D and headsets (e.g. Oculus Rift, Samsung Gear VR)
- Development tools: Netbeans, SVN, Git

Mastered skills:

- Solid programming experience and software engineering, knowledge of software design patterns,
- Experience in software integration (e.g. within frameworks or complex software architectures with multiple components)
- The ideal candidate will have solid software development, testing and integration skills
- English (written and oral)

Desired additional skills:

- Ogre3D, C++

Project Length: 1 year position renewable

Place: ISIR - UPMC

Stipend: depends on applicant qualification

Contact: Catherine Pelachaud, CNRS-ISIR; catherine.pelachaud@upmc.fr

To apply, send a CV, names of reference, master grades (for Master applicants) to
catherine.pelachaud@upmc.fr