



## Typology and simulation of emotions creation and self-expression through movements

6 Months Graduate Internship

### Project Description

The internship is part of a project to build a tool that would give to an instructor the possibility to direct himself as a 3D virtual clone capable of showing and expressing emotions. However, other applications of emotion generation should be taken into account, such as robotic or crowd simulation.

### Topic Description

Emotions, what causes them, their physiologic implications, and the many ways to express them (*eg.* facial or postural), have, separately, been the topic of several scientific studies.

In this internship, the aim is to regroup, compare and criticize these studies in order to suggest a typology of emotions that describes the emotional state of an agent, and the mechanisms allowing the generation of this state, its recognition, along with self-expression through movement.

The finality of the internship would be to experiment the highlighted mechanisms, through the fulfilment of a demonstrator.

### Internship Description

The internship will take place within our R&D team, localized in a warm and friendly open space of the 11<sup>th</sup> district of Paris. The payment is about 400 euros monthly, with the prospect of joining the team in a fixed term contract, rolling contract or a PhD thesis, based on the motivations and qualities shown during the internship. Applications can be sent to [contact@spirops.com](mailto:contact@spirops.com).

### Keywords

Artificial Intelligence, Procedural Animation, Emotions, Facial and postural self-expression, Physiology, Psychology, C++