



IRI-MdM International Internship Programme 2018

PROPOSAL MdMII-4

Animated characters based on textual descriptions

Supervisor:

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Proposal:

The idea of the project is to generate realistic models based on textual descriptions of body and face. Many times we can find in books or cartoons a description of several characters that appears on its story. If we could generate a models for those descriptions, this could be a first step towards create an automated animation film based on text descriptions. Also, another kind of funny application could be to create a textual description of yourself or a public figure and then find if the models created correspond to the reality. Using a software to render images [1] and a 3D human model [2] we can generate several human shapes and faces. For example, work of [3] collect information from users with body in different configuration parameters to obtain a correlation between the text description and the body parameters. In a similar way, we can obtain from a text essay description [4], the information necessary to find human body parameters that match a certain description. As for the faces, we could explore the algorithms suggested in [5].

Ideal Candidate:

- Knowledge of computer languages: c/c++, python
- Preference if have worked already with Blender or Similar and it's familiarized with text parsing tools and natural language processing

References:

- [1] <https://www.blender.org/>
- [2] <http://www.makehuman.org/>
- [3] <https://deeva.mmci.uni-saarland.de/>
- [4] <https://essayforum.com/writing/best-friend-lenka-description-person-16612/>
- [5] Bhatia N, Kumar R, Menon S (2007) FIDA: face recognition using descriptive input semantics, December 14.