

TheRiddlerBot: A Next Step on the Ladder Towards Computational Creativity

Ben Verhoeven

CLiPS, University of Antwerp
ben.verhoeven@uantwerpen.be

Iván Guerrero

Universidad Nacional Autónoma de México
ivangro@gmail.com

Francesco Barbieri

TALN, Universitat Pompeu Fabra
francesco.barbieri@upf.edu

Pedro Martins

Universidade de Coimbra
pjmm@dei.uc.pt

Rafael Pérez y Pérez

Universidad Autónoma Metropolitana, Cuajimalpa
rperez@correo.cua.uam.mx

We present a computational system that aspires to be considered creative by generating riddles about celebrities and well-known characters. The riddles are crafted by combining information from both well-structured and poorly structured information sources. This system has been implemented as an interactive twitter bot (@TheRiddlerBot). We intend our bot to go beyond mere generation of tweets where it makes all possible combinations of the information in our data, rather we want the riddle to be correct, coherent, and fun to solve. Each iteration of the riddle creation process involves selecting a character/person from the database – preferably not random, this could be based on current events extracted from news websites – and gathering knowledge about him/her by combining both our knowledge base and online resources, e.g. Wikipedia. The challenge then lies in selecting the right and appropriate information and presenting it in a fun and hopefully non-obvious way. One way of doing this is creating analogies between users by means of common attributes, e.g. ‘Doc Emmett Brown’ could be ‘the Walter White’ of ‘Back to the Future’ given that they are both scientists. The information is formed into a riddle by making extensive use of a multitude of phrase templates.

In the future we would like to be able to validate each aspect of the riddle creation in order to derandomize all modules and thus having all choices made ‘consciously’ by the system. For that purpose – and for the fun of it – we have made our twitter bot interactive. People can guess whom the riddle is about and reply accordingly. The first right answer for each riddle is rewarded with a point. If your answer is incorrect, the bot will tell you so. In the mean time, our system is gathering data about the number of answers, favorites and retweets in the hope that these might tell us something about the quality of the riddles.