Utility AI Readings

Joseph Petitti

November 20, 2019

Rez Graham Reading and Richard Evans Talk

Three questions about the reading:

- 1. Can you make the algorithm more efficient than calculating the utility for every possible action?
- 2. What kinds of agents would utility-based AI be best for?
- 3. What kind of data structure is good at storing a series of buckets of behaviors?

One major takeaway:

Always choosing the highest-utility action results in robotic-looking behavior. Instead, it's better to choose from a weighted subset of the best options. This way, the AI usually picks good option, but not always the most optimal one.

Alice and Kev

How does the underlying AI system influence the story that is being told?

Most of the story is generated purely by the decisions of the AI in the game. As the introduction page says "a surprising amount of the interesting things in this story were generated by just letting go and watching the Sims' free will and personality traits take over." By using the constraint of not interacting much with the characters leads to some interesting behavior. What's interesting is that a lot of the actions that take place in the game are actually not very complex. From basic actions like talking to another character or moving in a certain way the author is able to infer a wide range of emotions, interests, and motives for the virtual characters.