**Multiple Reward Machine Learning**

**by Ted Gress**

A prevalent handling of the education of students in public schools recently including both modifications of their behavior as well as educational content has been gravitating in different ways. One of these methods that has generated interest in the author is a method where the child performs a particular behavior behaves in a certain manner and is rewarded or punished in not just one way but multiple ways, giving them a choice as to how thy should be rewarded, amplifying the efficacy of the reinforcement.

I find the idea of this, although far from feasible at this point, to allow a machine-learning agent to be able to choose their reward, thought provoking. The only, and obvious, choice is that our modern day our computers do not have a free will, and therefore sentience and choice.

Possibly in the future we will be able to implement this in the same way that we teach children.

At present there may be a way to generate choice through random numbers or some other stochastic manner and from there implement the training on an artificial agent.