## Forecasting Individual Item Price Changes in Runescapeusing a Neural Network

Victor M. Reyes Espinoza July 23, 2018

## 1 Runescape

Runescape, a browser-based Massive Multiplayer Online Role Playing Game (MMORPG) contains a central item exchanged called the Grand Exchange (GE). At the GE, players can buy and sell items through limit orders at zero commission. Thisleads to many players choosing to day-trade by rapidly buying and selling itemsmost of their profit derives from the fact that some people purchase items at ahigher price in order to receive them instantly (the GE will give them the bestdeal and fulfill their order with the lowest priced item on sale). By buying itemslow, and waiting a couple hours for their order to be fulfilled, and then sellingto those who want the item instantly, they game the small profit margin to makegold pieces (GP).