

Project Scope

I've built a hybrid Machine Learning AI platform that allows bots, AIs and humans to interact and gossip. The theme is to simulate how gossip propagates, its impact on social st and see if we can programatically find insights as to why it is so useful.



In this simulation the bots will behave as rules based agents, they will have various personalities coded in, some will gossip, some will spread more often and some will be less interested in gossiping. There will also be AI agents (AI systems are optimisers, they work towards a goal i.e. improving status for themselves or spreading gossip as far as possible). The aim is to experiment with different rules, and see how these agents and the world evolves over time.

My engine generates a **LOT OF DATA and reports**, but also has fun interactivity mechanisms.

RULES

Rules

gossipStimulation

Value: 45

A maximum random value added to users gossip probability, the higher the value, the more likely all users are to initiate gossip. Example Usage

[C] Confirm [B] Back

To get started I designed some makeshift rules, such as:

1. Gossip can be created
2. Gossip can be spread
3. Gossip can have positive or negative sentiment
4.etc etc

As the project grew, I realised I want these rules to be adjustable, actually my aim is to have maybe 100 to 200 rules, that we could turn on and off. Then we could have a number of different sociology/psychology frameworks which would map to different rules, we could then compare and test them.

Example:

Sociology Framework/Theory A: Maps to Rule 1, 22, 44, 55..etc
Sociology Framework/Theory B: Maps to Rule 71, 88, 102. ...etc

Each of these rules will be fully documented in a dict and visualised for simplicity.

Technical Detail

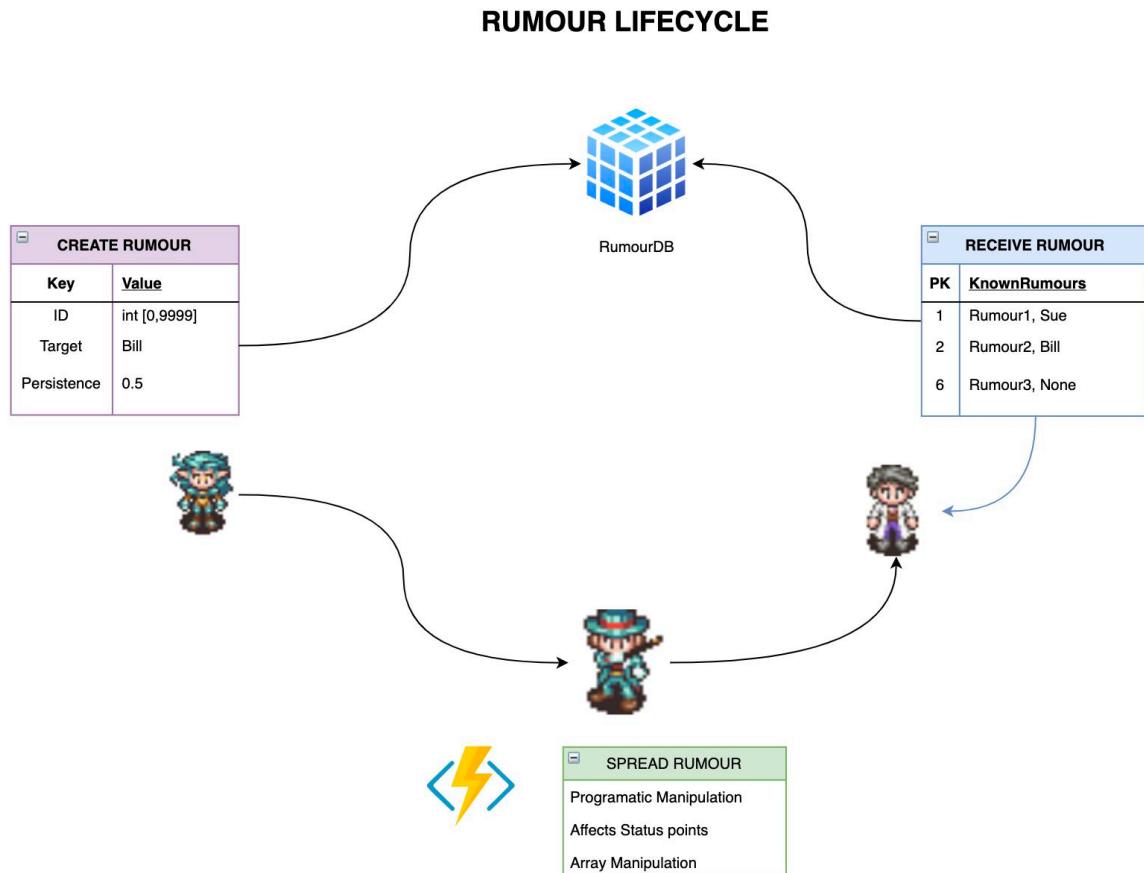
I have in fact built two engines in one product, the first engine is a Data Dense framework which allows the AI and the bots to run at CPU speed (this is too fast for humans to interact with, but produces huge data dumps and synthetic data).

The other is an interactive framework, it looks a bit like a game to keep users engaged however the underlying engine is almost exactly the same, it just runs at humans speed and allows people to interact with the bots and AI.

Platform uses python, pygame a number of libraries.

Rationale

In addition to curiosity there are lots of potential use cases (including industry applications), it can help generate defences against toxic social media marketing which expose blindspots in our evolutionary social mechanisms. This simulation could help us clearly identify these 'loop holes', outline what they look like, how the process is instigated etc. Alternatively it could also be used to further help marketing (an area of ethical concern).



Other use cases include understanding how human hacking by AIs will look like in the near future (AI assisted technologies such as GPT3 are being rolled out in call centers and industry - we are

now in an area of AI manipulation, it's important to understand what this will look like and how we can create defenses against this).

There is also the academic literature that could be produced on things like, programmatically comparing and contrasting well established Psychological and Sociological frameworkswhich leads me to why I need you.

Why I need Input from Sociologists/Psychologists

I coded this entire framework within two weeks, I can build anything required but I lack the academic understanding of what the real world looks like, what rules govern social interactions and what are the most common established literature in this area.

I need:

1. Someone to help educate me in the most common social theories
- 1.2 I will then encode all of this into rules and variables
2. You will act as **quality control** - tell me what looks right, what doesn't look right
3. Together we will create a **RULES DICTIONARY** which will map to certain social frameworks.
4. We then evaluate the models and discover the results produced

I do the work, you help provide input and provide academic guidance

What you get out of it?

The person involved will gain experience with quality assurance in a **highly technical project**, project management (because you will be steering me in certain directions), experience working with AI systems and in an agile project.

The project is voluntary, it's more of a side gig and shouldn't take too much of your time, it's a '**contribute when you can**' framework - no pressure, no stress!

More resources

Github: <https://github.com/murchie85/gossipSimulator>

Blog: <https://hackernoon.com/preview/iu2WkkRPchmx556Z6DqJ>

Demo:<https://www.youtube.com/watch?v=E7Ii-vlDomw>

Demo2: <https://www.youtube.com/watch?v=ZxhQbTfFHeg>