

Adaptive Neural Network Environment

Inputs:

- Erratic Movement of Mouse or Movement
- Avoiding looking at certain stimuli
- Microphone?
- Webcam?
- Hesitating/Freezing
- Running Away
- Pausing the Game

Methods:

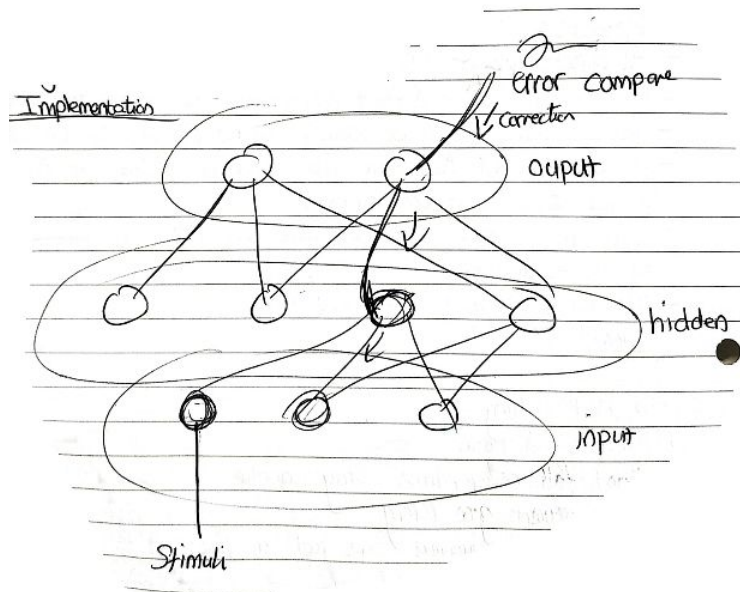
- AI directs player (“Don’t Believe Anything”)
- Multiple AIs set to different fitness levels to lower the fear factor
- Tension graphs where larger stimuli is supplies less frequently but at key points
- Perceptron based AI where fitness is different per AI to allow random stimuli so it can still learn
- Two bots, one encodes what the user did including back propagation while the other decodes what to do to the user
- AI constantly trying to understand user

Story:

- Hospital Setting
- Psychological Horror
- Can’t fall asleep, must stay awake
- Falling asleep kills player character
- Horrors in the environment, some real, some fake
- Goal to escape (perhaps find an antidote first)

Outputs:

- Doesn’t let the user pause the game in certain situations? (Above threshold)
- Pausing can still allow movement even with menu (Make menu transparent)
- Hallucinations as large focus
- Weeping angel concept of blinking
- Noises (Creaking, footsteps, knocking over objects)
- Passive and Active differentiator between outputs
- Phobias?
- Atmospheres such as fog, sleepiness and so on
- Lighting changes
- Props
- Movement
- Layout of hospital changed by AI (Maze Runner Esque)



Plan for next week:

- Meet at 11am in templeman wednesday 16th of October

To Do:

- Research Perceptrons (All)
- Read Unity Documentation on C# (All)
- Email Dominic for Meetings and Workspace Confirmation (Nick)
- Write Guide on Texture and Modelling (Jordan)
- Everyone to use guide to model their chosen item (All)
 - Assets Required:
 - Doors (Sam)
 - Trees (Nick)
 - Beds (Hoby)
 - Lights (Jordan)
- Create Character Controller & Menu (Maybe Add VR Support) (Nick)
- Collect Sound Samples as Group (All)

Bonus To Do:

- 4th Dimensional Movement (Reality is Deceiving, Non Euclidian)
- Easter Egg Planning

To Discuss Next Week:

- Sound Design/Music (Minimal)
- VR Controller
- Neural Network Design
- More Assets
- Reflect on Progress
- Core Mechanics (Necessity: Critical vs Optional)

