



Professor Purtee and Bella Save the World From AI
Robots
(or something like that)

Gameplay Manual

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Notes for testing

The gameplay description below is what is *intended*, some features are not implemented yet. For example, Bella is playable in all levels. For the intended experience, please try to refrain from using Bella's ability until you get to the last chapter. Chapter 3 has also not yet been implemented.

Storyline

Professor Purtee is an enthusiastic computer science professor by day, prolific artificial intelligence researcher by night. Despite having to grade hundreds of students' homework assignments and exams, Professor Purtee always finds time to continue the AI research grind.

One night, after hours and hours of coding neural networks and k-means clustering algorithms, Professor Purtee finally succumbed to his exhaustion and fell asleep at his keyboard. Little did he know . . .

His AI had just achieved sentience.

The next morning, as he was setting up for his CSC 171 lecture in Hoyt Auditorium, he noticed a strangely familiar figure approaching him. It looked just like him, but a little off. It copied all of his movements and followed him around. Panicked, he finally figured out that the neural network he created used him as a test data set in his sleep and created an evil AI clone of him!

Now, Professor Purtee has to run from the robots and find his way back to his secret basement lab so he can shut down the rogue neural network. With the help of his dog Bella and you, the player, will he be able to save the world from AI robots?

Gameplay Explanations

To save the world, you need to shut off the computer in Professor Purtee's secret basement lab (Ch 4). But first, you need to escape from Hoyt (Ch 1), make it home (Ch 2), and find the secret lab (Ch 3) (it's so secret that not even HE knows where it is!).

Make sure you aren't touched by the robots, or you'll restart the level! Although they **run slower**, these AI bots can **jump higher than you**, so it's almost impossible to pass them, unless you have Bella's stun ability (available for Ch 3 and 4).

When you first open the game, you spawn in the lobby, where you can select which chapter to play.

Chapter 1 – Escape from the AI-ditorium

Chapter 1 is primarily parkour-based. You must escape Hoyt by reaching the door at the end of each level. This is meant to be hard, but all levels are very much possible.

Chapter 2 – Clocking out early!

Chapter 2 is also parkour-based. You must leave the university and get home by reaching the door at the end of each level. This is also a hard chapter.

Chapter 3 – This house is too big (WIP)

Chapter 3 introduces you to Bella, your new companion, who can shoot projectiles to temporarily stun robots. In a more puzzle-based fashion, explore the different doors in the house and find your way to the secret basement

Chapter 4 – The secret basement lab

Chapter 4 is the final chapter, and you must navigate through Professor Purtee's elaborately complicated underground research lab to find and shut down the main computer. With Bella's help, save the world!

Controls

The gameplay controls in this game are simple:

- A
 - o Move left
- D
 - o Move right
- SPACE
 - o Jump
 - o Enter doors
- R
 - o Reload level
- V
 - o Toggle **vectorMode** (displays all vectors being used, try it!)

Bella can temporarily stun enemies by shooting projectiles (Ch.3 and after). To fire a projectile, just **click in the direction you want to shoot**. It will disappear after bouncing **three times** or after a set period of time. You must wait until the projectile disappears before you can fire another one, so fire them wisely.



You can navigate between levels in this game by entering doors. To do so, **press the spacebar while you stand in front** of it. The door will be highlighted when you are able to enter it; use them to select the level from the lobby, or to proceed to the next level.



Note: as of the first submission, colliding with an object cancels out any horizontal movement. That means, you currently have to press A or D again once you've cleared an object when trying to jump over it.

How to build your own levels!

In my opinion, the most impressive part of this game is the level-building capabilities. There are many more controls and functions in `buildMode`, so keep this as a reference if you want to build your own levels.

`buildMode`, triggered by the "B" key, was the method used to create all of the levels in the game. It keeps track of a few variables, `drawnShape` and `selectedShape` in order to allow interactions with specific drawn elements. There are a few `drawModes` which enable different types of interaction with the level:

- "e" : **environment**
 - Draws environment elements and appends to environment list
- "c" : **character**
 - Either places an enemy or sets the level spawnpoint
- "p" : **door**
 - Draws a door and prompts an input to specify its destination
- "d" : **drag**
 - Drags the selected shape (checks all `draggableShape`) across the screen
- "backspace" : **delete**
 - Deletes `selectedShape`
- "[and]" : **texture cycle**
 - Cycles through textures for given `drawMode` and displays current texture at top left corner of screen. Use to cycle through environment, character, and door textures.
- "\" : **background cycle**
 - Cycles through available backgrounds
- "ESC" : **clear current build**

When you've finished, hit "S" to save your level. You can load this level again at any time by hitting "L" in `buildMode`.