**O3-mini-high is the FIRST DANGEROUS Autonomy Model**

**(by Wes Roth)**

**Prompts:**

*Create a snake game in python.*

*Then make it play itself, the snake should automatically play the game, eat fruit and stay alive.*

so I just finished testing the 03 mini high and uh you need to see this we need

0:06

to talk about this because it just hits different usually I start these tests with a little coding problem and then I move on to reasoning and logic problems

0:12

Etc but usually with the coding I'll start making it more and more complicated until the model starts messing up until it starts breaking and

0:18

it can't really deal with the complexity so here I asked it to create a video game and it did it flawlessly then I

0:24

asked him to create a script so that the video game plays itself and it did that flawlessly then I added a bunch of Stuff

0:30

to make that video game insanely difficult it added those details and improved the script to play that insanely difficult video game flawlessly

0:37

at this point it was obvious that this model is much better than anything else we've seen and that the standard bag of tricks for testing these models just

0:43

don't really apply here we're not in Kansas anymore or whatever so I proceeded to give it some more difficult

0:49

tasks to do what I asked it to do was to create an actual AI like an actual

0:55

machine learning neural net an AI agent if you will to learn how to play that game to train itself over the course of

1:03

many many iterations in a sort of simulation to play this game and I do

1:08

mean to create like a model with actual weights like an actual neural net trained to play this game then take that

1:14

AI agent that AI brain take the weights out of the sort of the simulation and actually have it play Within the actual

1:21

game so that's probably a little bit more on the advanced side I think it's safe to say but I'm really trying to

1:26

test out what can it do kind of on its own now this model model is the first model to reach medium risk on the model

1:34

autonomy right so with the preparedness framework evaluation sort of like the AI safety testing like the guidelines for

1:40

high risk medium risk low risk Etc so the 03 mini is the first model to reach the medium risk on that scale the reason

1:47

it didn't get a high high-risk classification is because we still believe that it's not really capable of

1:52

doing real world machine learning tasks that would enable it to do research capabilities for self-improvement so

1:58

that's the o03 Mei we're testing the 03 mini high and we're asking it to create

2:03

these machine learning neural Nets that are able to train in simulation then taking those weights and applying it so

2:09

that it plays a game that it itself created just now with a whole bunch of Randomness that I added to it but yeah

2:15

it's not super scary yet but it kind of gives you a glimpse into what's coming make sure you're subscribed there's a

2:21

lot more coming soon and uh let's go all right so let's put this thing through its spaces so we have the 03 mini and

2:27

the 03 mini High all right so let's use that the sort of the better model first and foremost so I said create a snake

2:33

game in Python then make it play itself the snake should automatically play the game eat fruit and stay alive right so

2:40

in the past we've used uh sort of creating the snake game as a sort of testing thing at this point got to the

2:45

point where that's almost you know it's way too easy let's kick it up a notch and see if we can actually make the

2:50

thing play by itself so as you can see here it's mapping the strategy mapping the journey navigating paths Etc piecing

2:58

together Logistics and there it is wow that was very very fast so it thought

3:03

about it for 44 seconds and then in like like a second a split second it created

3:08

sort of the answer and here we have the python code so let's check it out all right so I paste that into I'm just

3:15

using py charm here and let's see what happens and there it is so it's Auto playing snake so the thing is going

3:20

around eating the fruit doing it all by itself and uh I got to say doing it very

3:26

effectively so no issues found wow that's pretty pretty pretty cool I got

3:31

to say all right let's see how well it does on sort of like iterating on the existing code so what we're going to do

3:36

is add a scoring system all right so it added some random fruits and scoring Etc

3:41

so let's try that or it's still writing it so interestingly since it's rewriting the code so it's adding to some existing

3:47

stuff so it's taking a little bit longer this time a few seconds but still very very fast all right so here it is it's playing by itself green is two let's see

3:54

what else so two and then it's going to e the red one red is one all right so you can see here oh wow so yellows four

4:00

so different colors mean different sort of scoring different amounts of points

4:05

but it's still it's playing really really really well all right next we're going to say let's add traps so these

4:10

are obstacles to avoid that will cut a piece of the snake have one appear every two seconds and stay there so let's try

4:16

that so this basically puts kind of like a time limit on the game so basically every 2 seconds a permanent sort of

4:23

thing will appear so let's see if it understands number one what I'm trying to get it to do and number two is it

4:29

going to remember to update the sort of the AI the uh the script for the snake

4:34

to make sure that it's not so it's it's avoiding the obstacles all right so interesting let's see how well that

4:40

worked and let's click play and there it goes so every two okay so purple is our little trap and ooh okay so we got two

4:47

now let's see three four so so far it's doing great uh every two seconds uh it's

4:52

being added and the snake is successfully navigating and avoiding the

4:58

little traps this is for Al um okay so it hit one it hit two it's

5:04

not avoiding them now it seems like so it's losing points for not avoiding those traps unfortunately all right so

5:10

let's do this let's have two traps appear every second that's number one

5:16

and number two make sure the snake avoids the traps make the traps have the snake lose half of its length so that

5:22

should make it uh significantly more difficult at least for for the the script the snake script to navigate the

5:29

various things so let's see how well that it does that so again it gives us the code fairly quickly let's check it

5:34

out so there it goes so as you can see the purples are appearing quite a bit faster this time the snake still going

5:40

eating the various fruits collecting points and let's see the first time it collides with the purple actually

5:45

navigating it very very effectively I am kind of fascinated I don't think any of the earlier models could have done this

5:52

because this seems pretty complex I got to say this is uh this is pretty

5:58

impressive so all right so it's up to 2 46 47 49 interestingly you can probably have it write multiple sort of little

6:05

pieces of code to to do this to see which one gets higher and now that I think about it it probably would be

6:11

possible for it to actually do some machine learning and have it create a

6:17

sort of a selflearning thing for this game for example where an algorithm goes

6:22

and tries to teach the snake how to play better not an algorithm but an actual like machine learning like you're training a neural net to play this game

6:28

better okay so it hit a purple somewhere and got cut in half I I missed exactly where but um wow it's getting really

6:36

complex this time look at that okay it hit purple one again but it had no choice I I am I am a lot more excited

6:41

about this than that I probably should be but this is this is a thrilling um wow wow it has to now go through the

6:47

purples um because there's no way around it and uh wow I'm sorry I apologize if

6:53

I'm getting way too excited about this but I don't know that that was kind of thrilling that was a pretty good script right I got to I think oh it says a

7:00

final score 134 all right so here's my question can this thing actually create

7:05

um using Python and whatever open source tools we have for training models can it actually create with like reinforcement

7:11

learning can it create a model that will be capable of sort of improving itself

7:16

in how well it plays that game so first of all let's ask it how it would go about that first and foremost and then

7:23

see if it actually can execute that by the way every time I do one of these so there's often people in the comments

7:28

saying well this is is not as impressive and they point out certain flaws with it and stuff like that so I've been testing

7:35

these models for probably like a year and a half with a lot of these coding challenges having to do you know Tetris

7:40

and snake and and and things of that sort and the one thing that's like so apparent to me so obvious to me is the

7:46

rate of progress these things are getting a lot better coding and they're getting better fast so not only are they

7:52

getting like more accurate smarter at figuring out how to do stuff they're get the code is getting better it's able to do more complex coding the progress is

8:00

exciting it's interesting so I'm going to ask it if we want to make a machine learning model that learns to play this game better and better how can we do

8:06

that so kind of explains you know you can use a reinforcement learning defining the environment action space

8:12

Etc reward function so positive reward for eating the fruit negative reward for colliding with walls itself or traps it

8:18

suggests potentially wrap your game logic into an open AI gym like environment and it links us to open AI

8:23

gy choosing a reinforcement learning algorithm implementing the training Loop all right so thanks for all that that

8:30

was quite a bit of text that it's put out there uh I'm just going to go ahead and say go ahead and do it go ahead and

8:35

build that use the simplest approach possible something you will be able to execute easily so I'm I'm just going to

8:41

leave it at that I'm not going to give it too many more details and just just see where this kind of goes I'd be curious to see so it's talking about

8:47

crafting the environment simplifying the approach and it's mapping out reward for fruit consumption so I I don't know if

8:53

it's going to be able to do this or not quite yet we we'll see kind of like where we are but I just as I'm thinking

8:59

about this like can you imagine like assume this keeps getting better eventually you will be able to not only

9:06

number one you know let's say create your own games but you're going to be able to have this thing just using

9:11

something like this 03 mini high but also have it uh create some machine

9:17

learning like environment some sort of a RL gym create an AI agent that goes in there it starts fumbling a lot around

9:23

trying to learn how to play the game slowly over time getting better and better and better I mean we're getting

9:29

to the point I'm getting ahead of myself here but we're getting to the point where you're going to be able to create an entire worlds and then simulate

9:35

little uh real life AI agents within those worlds going around and learning and getting better cuz keep in mind

9:41

what's keeping you know 99.9% of the population from doing this stuff is you know you got to you know go to school

9:47

learn a lot of different stuff there's a lot of stuff a lot of like cognitive work and learning that has to go into it

9:53

right you have to know python you have to know a lot of the various machine learning things it's it's so daunting

9:58

it's so complicated to to be able to even approach it if this thing does a lot of the sort of the heavy lifting for

10:04

you and you're sort of just kind of orchestrating the thing kind of pushing it in the direction that you want to go and again we might not be at that point

10:10

you know today but you know imagine some forward progress imagine some improvements am might crazy or is this

10:16

like insanely exciting all right so thought about reinforcement learning for snake for 1 minute and 39 seconds so

10:22

that's the longest one quite yet so they're building a deep Q network using pytorch that learns via reinforcement

10:27

learning to play the game example uses a very middle M 11 feature state representation and three discret

10:33

relative functions turn left go straight or turn right before running the code make sure you installed uh the JY numpy

10:39

torch so P torch is by meta it's open source P torch is a machine learning library based on a torch Library used

10:46

for applications such as computer vision and natural language processing originally developed by meta Ai and now

10:51

part of the Linux Foundation Umbrella by the way if you've never used Linux this might be a good time to start thinking

10:56

about maybe just installing it it's free it's open sourced you can install it on your computer alongside windows or

11:02

whatever it's not super complicated but is you know it's going to be a little bit frustrating anytime you start something new you have to kind of get

11:07

through that uncomfortable period of learning it but one you will be able to do a lot more stuff just in general but

11:14

also specifically related to machine learning and all of this stuff that's happening if that's something that you're interested in again back in the

11:21

days even 5 years ago the amount of learning that you had to do to even dive

11:26

in and start was huge now with a lot of these AI models like that's really compressed cuz you can you can start

11:33

developing stuff faster so sort of one way that you have to you know go through learning before you take off and actually start being able to build stuff

11:39

that that really shrunk and that's really exciting just because of how like the reward systems in our brains work like right if you have to do something

11:46

boring and hard and complicated for a long time before getting to the reward that's difficult if you're able to like

11:51

dive in and start building sooner for most people that's going to be a lot more interesting and easier you're able

11:57

to just sustain that learning longer and to if you find yourself annoyed with some of the stuff that Microsoft is doing with Windows or or apple in their

12:04

operating systems like if you don't like the fact that they can do whatever they want to you and you can't really do much about it well Linux kind of solves that

12:10

all right so we got to make sure we have this installed all right installing gy numai torch I'm assuming it's pronounced

12:18

numai right like python a lot of you love to correct me on my pronunciation in the comments I do appreciate it I

12:23

tend to read a lot I feel like it's an easier way to learn just like the data is a lot more like compressed reading as

12:29

much faster than than listening or you know watching a video or audio or whatever but it does mean that I'll just completely butcher people's names or or

12:36

certain things where you know you don't quite know how to say it all right so here's the code that it gave us and uh

12:41

let's see so we're numpy importing numpy gem torch and this is a a halfy amount

12:48

of code it looks like so notice uh so we're defining the snake environment and this is so it comments it out so it like

12:54

writes out what the code's going to be doing and then the rest of the the sort of the codes so let's see what happens

13:01

here Define the DQ and agent then we're training the agent all right so it looks like after every episode they're going

13:07

to print the total reward so I don't know if this is going to work or not but as this scales up I just this is

13:13

extremely exciting as it gets better more robust all right I'm going to run it so it's uh running through like 50

13:18

now 70 now 100 episodes so it looks like it's each time sort of having a reward

13:23

different rewards we have negative and positive ones so it's important to understand so for for a complete

13:30

beginner that doesn't know too much about you know writing creating video games I mean snake is a simple game but

13:36

still you know you got to write python code right and then creating a machine learning model to do this to learn how

13:43

to play the game better like let's say you took a a random person that didn't have those skills didn't have a lot of the tech background like a like a normal

13:49

person with regular sort of computer using skills they know how to install stuff they know how to search for stuff but maybe not the you know they don't

13:56

know how to use terminal to to install the various packages and libraries they they don't know how to use GitHub right so like think about how long it would

14:02

take that person before chpt before these models to get to doing this how long did it take me to you know put in a

14:10

few prompts and have this happen I don't know maybe like 10 20 minutes like I'm cutting out the spaces between a lot of it so it's a lot faster for you but it's

14:16

not a long time all right so I'm going to take this I'm going to copy this and we're going to say I ran the program here's the output what's next so again

14:23

I'm I'm just trying to like keep it as like brained simple as possible right so and the reason that I'm doing that there

14:29

was this point when Chad GPT just came out or maybe it was when GPT 4 just came out and this is before a lot of people like Gras or is and somebody was just

14:35

like demonstrating like they would ask it like I have this picture how do I put it online to show it to my friends right like like a very kind of like basic way

14:42

of of saying things almost childlike and Chad is like oh well you need a website so here's how you do that here's you

14:47

know the HTML to do that and then the guy's like well how can I have it so my friends can see it it's like well you need to host the the website here's how

14:54

you host the website so it like walks them through it so just just think about what I'm what I'm saying here I'm saying I'm I told it what happened right and I

15:00

just copi and pasted this in and I'm what's next think about how like alien that would seem 5 years ago asking the

15:06

computer just like go oh what's next like how would it know like it has to understand what I'm trying to do it has to understand that like I'm trying to

15:12

now take that sort of train model and like unleash it in the snake game or or let's see where it goes with this but

15:18

the point is just just take a second to appreciate this how vague that sort of question is like I am doing the like I'm

15:26

I'm offloading all of my cognitive load onto this thing like I won't even think for a second to formulate a better

15:31

question there was a Star Trek episode where they encounter this uh civilization that doesn't really know how to do anything so they kidnap one of

15:37

the engineers from the Enterprise and they're like oh it's broken can you make our ship go this is going to be us with

15:43

uh sufficiently Advanced AI soon like how do you make it go so now the training is complete and you've seen promising results from your agent's

15:49

training with rewards steadily increasing so to to the people that maybe uh are missing what's happening

15:55

here so this thing wrote a reward function to train that snake to play the game better right and so it gets

16:01

positive points for you know eating all of the things and surviving and it gets negative points for whatever crashing

16:06

into the obstacles and that reward function is is spelled out by Chad GPT by 03 mini high and so here look episode

16:14

one like is just it's negative -12 negative 1ga 11 right it gets too close

16:19

to positive but still like it's just negative negative negative like it's just God awful it doesn't know what it's

16:24

doing it's like what how do you even play this game so it's probably just randomly mashing buttons and dying right

16:31

and it's doing that for a while right it's just negative negative like like it's just horrible by episode 76 it gets

16:38

its first positive score right so so maybe like figured out how to turn or something it just started to connect the

16:44

dots like what's what right but it still just got awful negative negative negative oh it gets uh 15 uh but then

16:50

notice somewhere here right so all of a sudden it's not all negative like you're getting more and more positive results

16:55

here here here all right and so you scroll down a little bit further and all of a sudden it's like 50/50 only half of

17:01

the results are negative half are positive you know we keep going and going and going and all of a sudden look at that it's getting 100 plus 100 points

17:08

like plus 7 plus 6 plus 38 so now the negatives are less and less there's more and more positives and the positive

17:14

numbers are steadily going up and as you can see here as we're approaching this is like we're approaching 400 these

17:20

numbers are mostly positive and and higher than they were right so we're hitting 100 plus more and more and more

17:26

and more and uh as you can see here for episode 500 like they're pretty much all

17:32

positive and they're all pretty high so this thing build a functional machine

17:37

learning model to learn how to play this game that I just made up that I had it make so it made a game and made the game

17:43

play itself then create a machine learning model to have the game play itself better the game that they just created if you're not a little bit

17:49

either excited or or scared depending your your view of how this is going to go then I'm not explaining it properly

17:55

cuz I am like kind of giddy with excitement all right so we've trained the agent the rewards are steadily increasing so the next step is uh

18:03

evaluating analyzing and refining the model all right so now we can evaluate the agent so we can run it in evaluation mode using a greedy policy with Epsilon

18:10

equals zero so before you'd have to like consume textbooks before you can get to this point now I feel like this this

18:16

might be even easier for like a like like a child to to grasp I mean this is not super complicated I'm keeping it simple but you get how much faster that

18:23

sort of like learning Loop that iteration Loop for for a human being can be learning something like this when they can just visually get to doing

18:30

stuff like this like Fast within minutes so it explains how we might be able to like watch and like render that thing

18:35

playing live and then here's how you would do that all right so let's try that so I I get a error message but the

18:42

files there normally you'd have to figure out what's going on and troubleshooted but here I'm just going to copy and paste that error into 03

18:49

mini high and uh say you deal with it I won't even say anything I just paste the error code in there okay so it's just a

18:55

different type of file so I changed that and we just going to run it again get another air code source code strink and

19:01

I contain null bytes okay so I I have to use a little bit of my human intellect here to help the the thing out so it's

19:06

not you know super intelligence is not here quite yet but very close all right so the training file is saved as you

19:11

know whatever snake. pth and you need it as snake whatever Pi can you rewrite the original code for training or the new

19:17

code for visualizing it so that it's consistent so it's using uh one thing in one place another thing in another place

19:22

so again what I'm trying to do here is have it solve the issues and do as much of the thinking as possible on its own

19:30

so there I did sort of have to step in and just like connect the dots a

19:35

littleit like hey you did this here and this other thing here so fix it however you want to right I'm not even telling

19:40

it how I'm just like how are you do it fix it and so basically what we're talking here is so the the trained models weights right so the the brain of

19:47

it the neural Nets it's saved in that snake DQ and. pth file if you ever

19:54

wonder what that looks like uh here's here's that and just text format but what it did is actually combined both

20:00

those codes into one oh my God okay so here's here's the code I'm kind of blown

20:05

away so far so let's run it okay so again it's running just the training but it g it gave me two commands so I can

20:12

run the training and I can run the the visualization separately so we're going to try that next but here so I'm running

20:18

it again so as you can see here it's going through so far 300 episodes the numbers are becoming positive more and

20:24

more often and at the end of it I'm assuming it's going to sort of rewrite the original weights that we've had

20:30

saved in that folder with the new weights so there we go episode 500 and here as you can see so this is this is

20:36

basically what we ran and this we would use this to do the evaluation mode it

20:42

sounds like we would only run it for five episodes all right so I'm heading some issues because I'm running this on on Windows I just need some extra stuff

20:47

to install but again if you're running to these issues you just ask again the O3 mini high or whatever you're using

20:53

for directions how to do that it will figure it out and I feel like a very

20:58

soon it'll do it for you if you allowed it to all right so a lot of the issues are easily fixed I just am trying to

21:04

again see if it's able to do all this with as little input on my part as possible normally what you would do is

21:11

you would have that get for Windows uh installed and then you would use the different commands to run you know the

21:16

training versus the sort of the visualization the evaluation now I'm just going to say have the eval be the

21:22

default so it spits out the code let's run it and there it is so here is kind of representing what it's doing with

21:29

these x's and as you can see just running a number it sort of just

21:34

representing that it's running it with those notations and we can probably figure out what those notations are so S

21:39

I assume is snake X is the obstacle and whatever the other ones H are the fruit

21:45

so as you can see the snake here and it continues so it's basically like frame by frame playing out these games uh

21:50

using text and it ran it for 10 episodes and the total reward is 124 all right

21:56

but the question is how can I take that trained agent now and have it play the game that you made in Python so the

22:01

original game that we made so we've trained a thing to play it how do we make it play it the actual thing I was thinking how many years do you think we

22:07

have of like Competitive Gaming that's left like out of all the like the online Competitive Gaming that you can play or

22:13

the MMOs or or anything of that sort like how many years do we have until they're dominated by these sort of like

22:20

self-created AI agents so one issue we may be running into here is like the context window so keep in mind that

22:26

we've asked it to build this game like a long time ago and since then it's been outputting tons of code tons

22:33

of text where probably like 10 or 12 prompts deep into this thing already so what I'm going to do is I'm going to save this actually it says I can't

22:39

attach files I'm going to just copy and paste that over so all right so I'm say here I will copy and paste the game code

22:44

below at the part where the agent plays the game instead of the scripts so the scripts that the computer wrote right so

22:51

use that file that contains the weights for the trained agent so here I'll say you know instead of the script

22:57

you wrote so here I'm spilling it out a little bit more but uh that might be necessary here cuz it might not have

23:03

everything in its context window and I just copy and paste that entire code that it gave me just down below here and

23:08

click goo so initially just wrote a little script a python script to control

23:14

the snake so the snake moved around based on whatever but it was coded next what we did is we created like a

23:20

simulated environment where that snake learned to play the game better so you can see kind of it visualized with those

23:26

x's and s's on that grid so the snake would run through the game 500 times and

23:32

learn how to play it better and now what we want is to use that trained agent those model weights to play this game

23:39

all right so I'm pretty sure it figured out what I want notice that that took 34 seconds that's in incredibly incredibly

23:46

fast I feel like all right what's the chance of this working I am like kind of nervous here come on please work so here

23:52

it is the snake agent is playing the game and I I'll go back and I'll verify

23:58

that this this is pulling from the model weights but so for the time I'm going to I'm going to assume it did everything

24:03

right it said it did everything right so there should be no script in there and it should be the model weights I'm I'm

24:09

losing my mind here just to kind of reiterate what just happened so 03 mini

24:14

High build a snake game that's number one so it used python to create this game and it wrote like a little script

24:21

for the snake to be able to play the game and the script was pretty good right it's this is not a complicated

24:26

game but we wanted to kind of take it to the Next Level and we wanted to see if we can train an AI sort of a neural net

24:33

right some sort of machine learning thing to well I'm not 100% sure what it did there but it is using the the thing

24:40

that we've trained it to do as you can see here so it's loading from the file and if it can't load the model weights

24:46

we get an error here so really fast I'm going to go back and I'm going to retrain the thing with the original code just to make sure everything is working

24:53

properly we have the sort of the latest weights the best possible weights because if we ran the other valuation

24:58

I'm so I'm not sure if that over wrote it or not but let's run it for the full 500 episodes that should give us like

25:05

the final weights like the best trained model possible at which point we're going to use that to run the game again

25:12

and see if it does a little bit better cuz it kind of started like twirling and just kind of died at some point all right so it's done and we're going to

25:18

run that agent again so let's see what happens so there it goes let's see how high it can get I think the original one

25:24

was either the score was either like 130 or in the 140s maybe like 136 138 something like that so if this little

25:31

snake robot AI agent can beat that score I would be pretty impressed you know

25:36

what actually I it doesn't even matter the the point of this wasn't to necessarily create some Advanced AI

25:42

thing because I mean a python script is probably good enough it's chasing its own tail it's now literally chasing its

25:49

own tail because it confuses the green with the green change the game so that there's no green fruit that confuses the

25:56

AI agent all right so here we go again hopefully now we're going to have we're not going to have the issue with the

26:01

green fruit uh spawning and confusing our little AI agent since it is green it

26:07

itself green and the one of the colors of the fruit was green as you can see at some point got stuck in a loop chasing

26:12

its own tail which is kind of hilarious I guess but also uh youve just witnessed kind of a notorious problem that can

26:18

happen in machine learning when you mess up the reward function somehow there's something like um that you didn't think

26:25

through something you didn't quite expect that was exactly it I mean we trained it to chase the fruits all right

26:30

so I tried it one more time cuz last time it kind of got a little score so it's up it got to 97 a score of 97 and

26:35

now let's compare that to so this is the original uh game so this is not the neural Nets this is not the AI is just a

26:42

script that the Chad GPT that it wrote for us so it's just a simple logic based

26:48

script written in Python for how the snake should move and so I'm thinking what happened was it probably did just

26:54

really well on the one time that we've tested it so as you can see it still has those those green things so this is the original one with um the uh obstacles

27:02

appearing every two seconds or whatever it is so let's see how high it can get okay so I I think the python script here

27:08

is going to work better than than training an AI model but that's we've simply didn't pick we we didn't pick the

27:15

right sort of uh uh problem they needed in your old net or we can also mess around with the different machine

27:20

learning models different like reward systems uh you know again I told it to use just the easiest one possible I'm

27:26

sure if we ask for something more advanced Maybe we can create an even better snake playing Agent but again

27:31

keep in mind this was all kind of like on the first try so with more iteration we can probably build something a lot

27:37

more robust but with all that said I'm not going to lie this this felt incredible so I don't know if this is

27:42

like the chbt moment for for coding or or machine learning or the abilities of this model I don't know if 03 mini high

27:49

is that threshold or not I have no idea what I got to say is like over the last uh one to two years testing out these

27:55

models there's obviously a noticeable Improvement to we started where like you'd be joyful if it figured out how to

28:01

make a snake game that you had to play if it could make it on the first try like if it was able to do that you'd be like all right yes very good you'd be

28:08

happy about that now I feel like I'm throwing a pretty diverse set of tasks at it and I understand a lot of people

28:14

say that this isn't the super advanced stuff and I do plan to do this exact test with something a lot more advanced

28:21

by the way if um you have an idea so what what I want to try to do is something that involves like some sort

28:27

of a video game something VIs visual cuz that makes a lot more exciting for these videos obviously so with something that has like a visual component that a video

28:34

game is great but there it could be something else where we could build some sort of machine learning model on top of it if you have an idea posted Down Below

28:40

in the comments don't do something like insanely complicated but something that's like above this something that's

28:46

intermediate like if we if we call this simple don't say like a poe2 grinding

28:52

bot that can play the game for you like not that high yet you know come back a little bit like what's kind of in the middle something that this can hand but

28:58

still more complex but this definitely feels like we're just a threshold of something is feels different because you

29:05

see this model creating neural Nets to solve certain tasks it does it easy it does it underly it does it with the most

29:12

basic of prompts you know back in these people were saying how prompt engineering will be like the greatest sort of desired skill you my prompts

29:19

were basically like oh it's broken make it go can you make it go that was sort of the complexity the engineering of the

29:25

prompts that I've uh that I've did here and I just just worked most of the things that that were problems that you

29:31

saw most of the errors were probably just due to me being on Windows if if if I was doing this on Linux I I feel like

29:37

I would have avoided most of them the issue where I didn't find the right file extension where I had to kind of connect

29:43

the dots for it even though yeah so I had to like think about it a little bit and figure out what the issue was noticed that the solution that it gave

29:48

me was perfect cuz it had part one and then part two and those two parts there was a little bit of a mismatch so I said

29:55

well can you rewrite either part one or part two it didn't do that that if you noticed even though I I said to do that

30:00

it said no no no I'm just going to like combine the two and that and and fix the issue combine the two and here's just

30:06

one sort of code one file with all of that I remember Sam Alman in some one of his interviews mentioning this that that

30:12

eventually these things will feel like a very smart highly paid assistant so it's not going to be like your Lackey that

30:19

does whatever you tell it to do right because if you for example are hiring some worldclass lawyer to help you out

30:24

or like a doctor like it's not you you're not just telling them what to do and they're doing it right you're so you're sort of saying well I kind of

30:29

want this they might correct you they might even say no you don't like you want this other thing or or they'll slightly adjust it they'll make it often

30:36

times they'll make it better if you can kind of communicate where you want to go they might provide a better solution for you so what I told it to do it didn't do

30:43

it it did something that was better for me it it provided me with a more elegant solution than the one that I I was

30:49

requesting its ability to explain how you would go about designing these machine learning models to to to teach

30:55

it to play Snake and then just like boom EX it and then me just I mean I was just clicking one button right I would copy

31:01

and paste that code I would click go and it would go anyways we're going to be doing a lot more things with this I can

31:07

already sense it but yeah let's say uh this does not feel like the rate of AI progress is slowing down it's like with

31:14

iPhones or whatever a certain piece of technology once you get to iteration 789 whatever you're not as excited about the

31:21

next iteration it's it's slightly better it's an incremental Improvement this doesn't feel like just an incremental

31:28

Improvement it's not revolutionary right it's not a Quantum Leap or whatever but it just feels like it's it's a big step

31:34

forward but keep in mind that this thing has only been out for what an hour or two now so maybe as I keep using it I'll

31:40

find more and more issues with it but for this kind of the first test I got to say I'm a little bit blown away it's not

31:45

revolutionary but there's there's something special happening here and this is not even the model this is like

31:50

the mini this is like the small version of it this isn't the 03 so there's that that's it for meow Wes forgot to record

31:57

an outro so subscribe to give you the proper motivation to subscribe here's my cover

32:04

of Staying Alive by the BS well you can tell by the way I use my

32:09

walk I'm a woman's man no time to talk music loud and women warm I've been

32:16

kicked around since I was born and now it's all right it's okay and you may

32:21

look the other way we can try to understand the New York Times effect on man whether you're a brother

32:28

or whether you're a mother you're staying alive staying alive feel the city breaking and

32:35

everybody shaking and we're staying alive staying alive ah ha ha ha staying

32:42

alive staying alive ah ha ha ha stay alive

English (auto-generated)