

Forum:[Hack Forums](#)

Thread: [\[THEORY/IDEA\]Homework OCR - A program that does homework for you!](#)[\[THEORY/IDEA\]](#)

InfinityCipher - February 2, 2013, 11:47 am

I'm thinking of trying this just to kill some time, do you think it would be possible?

How it will work :

First you would take a picture of your homework, after that you would put it on your computer.

Next you would input the picture into the program

The program will then analyse it using OCR and calculate all the problems, after its done it will print out answers.

NOTE: This is more of a playful project then anything so yeh...

Fereta - February 2, 2013, 12:04 pm

I doubt you (or anyone) would really be able to make this happen.

InfinityCipher - February 2, 2013, 12:26 pm

(Feb 2, 2013 01:04 PM)Fereta Wrote: [\[CITE\]](#) I doubt you (or anyone) would really be able to make this happen.

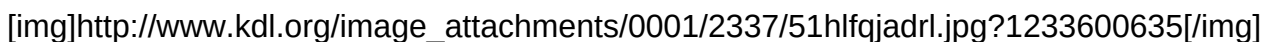
It's just a playful idea, sheesh ?

Lottery. - February 2, 2013, 12:32 pm

It's not really practical but I guess if it were more on the possible side then it would be a cool project. It would take months and months of coding and by that time, you may not even have any homework left to do.

Klayderpus - February 2, 2013, 2:33 pm

Someone just saw their 5th grade reading list.



+TOAST - February 2, 2013, 2:41 pm

(Feb 2, 2013 03:33 PM)Klayderpus Wrote: [\[CITE\]](#) Someone just saw their 5th grade reading list. If I could I would give you all the rep in the world right now

OP: Creating a program this complex would take much more time than ACTUALLY doing your homework.

Unless your homework was to create this program... in which case you are fucked

nondescription - February 2, 2013, 5:11 pm

(Feb 2, 2013 03:41 PM)tasty_mother Wrote: [\[CITE\]](#) If I could I would give you all the rep in the world right now

OP: Creating a program this complex would take much more time than ACTUALLY doing your homework.

Unless your homework was to create this program... in which case you are fucked

Exactly and lol you don't have a clue how much work this would take.

1. For OCR to even work you would need to add in every letter of every font possible lowercase and uppercase.
2. Your idea is somewhat of an AI and let me tell you this to make something even close to AI you need to be a genius.

This project wouldn't take months but years to perfect and not worth the hassle...

Sparta. - February 2, 2013, 5:42 pm

(Feb 2, 2013 06:11 PM)Eleskay Wrote: [\[CITE\]](#) Exactly and lol you don't have a clue how much work this would take.

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Nothing is impossible. Yes this is possible, but it would take a LONG time. And money. But if you did make this, you'd make a large sum of money.

+TOAST - February 2, 2013, 6:10 pm

(Feb 2, 2013 06:11 PM)Eleskay Wrote: [\[CITE\]](#) Exactly and lol you don't have a clue how much work this would take.

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I know that... Thank you.. and its not just fonts, pictures are not perfect black and white and the slightest rotation would make reading it even harder. It would take a crazy amount of work and thats why I said it was completely impractical

OMARATION - February 3, 2013, 8:19 am

Exam boards have this.

They analyze the papers and cut them on a specific borders and check them through the machine, but of course they go over it, as it's important :)

Good luck with this -_-'

nondescription - February 3, 2013, 8:37 am

(Feb 2, 2013 06:42 PM)Sparta. Wrote: [\[CITE\]](#) Nothing is impossible. Yes this is possible, but it would take a LONG time. And money. But if you did make this, you'd make a large sum of money.

When did i say it was impossible i never even implied it was possible just far tooo much work.

Sparta. - February 3, 2013, 9:06 am

(Feb 3, 2013 09:37 AM)Eleskay Wrote: [\[CITE\]](#) When did i say it was impossible i never even implied it was possible just far tooo much work.

I wasn't directly talking to you, I would have quoted you if I had.

oneupe1even - February 3, 2013, 10:36 am

(Feb 2, 2013 03:33 PM)Klayderpus Wrote: [\[CITE\]](#) Someone just saw their 5th grade reading list.

[img]http://www.kdl.org/image_attachments/0001/2337/51hlfqjadrl.jpg?1233600635[/img]

I liked that book, got me thinking about shit.

TheColdHacker - February 3, 2013, 12:04 pm

This is actually Vary Possible, You could put Ur answers on a scan tron and.... that's all i got :P

nondescription - February 3, 2013, 2:30 pm

(Feb 3, 2013 10:06 AM)Sparta. Wrote: [\[CITE\]](#) I wasn't directly talking to you, I would have quoted you if I had.

My bad I misunderstood, sorry for any trouble.

101101000111000 - February 3, 2013, 8:10 pm

A guy by the username of Overv did this on another forum, but he wasn't giving it out free, and is no longer on that forum. If you can track him down, he might sell it to you.

vitafortis - February 4, 2013, 5:01 am

A project this complex requires an "Expert System" structured by Deep Learning to make it work. This then makes the software an AI, something people have tried to make for decades. All AI's I know of are mediocre at best and need help to properly function. To make a true AI would take hundreds of years of training and examples to fully understand how to properly behave.

Now, back to your question. Possible? Yes. Feasible? Hell no, unless you incorporate an OCR engine already made. Then you could strictly focus on the algorithms and rules. You'd then have to do mathematical proofs and then incorporate them into your AI so it can prove or disprove any equation. Why? It needs to know when a question is impossible or not, but this leads to an unanswered question: Are there any unsolvable problems?

Good luck, seriously you'll need it.

101101000111000 - February 6, 2013, 1:45 pm

Stop making this seem much more complicated than it seems. AI? Is that some kind of fucking joke? It's entirely feasible because I've seen it done before in a matter of weeks. "Expert System" laughed out loud mate...

vitafortis - February 6, 2013, 3:05 pm

(Feb 6, 2013 02:45 PM)101101000111000 Wrote: [\[CITE\]](#) Stop making this seem much more complicated than it seems. AI? Is that some kind of fucking joke? It's entirely feasible because I've seen it done before in a matter of weeks. "Expert System" laughed out loud mate...

Yes, because you're a genius in this field. Tell me, can you differential equations? Ha, I laughed out loud my ass. Tell me, what kind of system do you know that was made in a few weeks that can do math from algebra all the way to differential equations and beyond? It takes years to master those courses on average, so in order to make a system that can do those for you would take well over a few weeks. You are too stupid to argue with. Good day sir.

Irritable - February 6, 2013, 4:31 pm

To everybody with these bizarre ideas that this is an impossible feat and/or would cost money and/or require years of time: You're wrong.

What the OP would theoretically need to do is:

A) Create a text-extracting image analyzer (those have been around for fucking decades)

- B) Parse basic English statements (those have been around for fucking decades)
- C) Compute math (calculators have existed again: For fucking decades)

This is an extremely easy concept. It wouldn't take anyone who honestly wanted to create it, much time at all.

Hell. Cameras have freakishly good facial recognition now. Recognizing a STANDARD BLACK IMAGE isn't hard at all.

In regards to AI: vitafortis: What the fuck are you smoking, boy?

Artificial intelligence has been around for decades. Pong was the first one I can think of that implemented AI.

You have absolutely no idea what you're even talking about. It's incredibly ironic that YOU would call this other person "stupid," and refuse to argue with them. I'm sad to say: But I'm not even going to bother arguing with you. Too magnificently ignorant of the subject of AI and AI theory as it is, based on everything you just said.

"True AI." Which is exactly what "AI" means, but "true" is implied (as are most TRUE English statements). True.

Tando - February 6, 2013, 4:52 pm

Totally defeats the purpose of practical learning.

Natecat33 - February 6, 2013, 10:36 pm

(Feb 6, 2013 05:31 PM)Irritable Wrote: [CITE](#) To everybody with these bizarre ideas that this is an impossible feat and/or would cost money and/or require years of time: You're wrong.

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"True AI." Which is exactly what "AI" means, but "true" is implied (as are most TRUE English statements). True.Lolz. In case you didn't notice, AI that can respond to direct questions with a human like answer is kind of rare. You also imply that Pong AI is similar to the type of AI you would need for this project. I wrote pong once, and the AI took about 10 lines. This project would probably need thousands of lines of code just to parse the directions, not even mentioning solving complicated equations. Comparing facial recognition to text analysis? Lolz.

Irritable - February 6, 2013, 10:50 pm

(Feb 6, 2013 11:36 PM)Natecat33 Wrote: [\[CITE\]](#) In case you didn't notice, AI that can respond to direct questions with a human like answer is kind of rare.

You are referring to basic text parsing. Those are not rare. They have been implemented decades ago. They are the entire basis of RPGs. My all time favorite: Zork (1980s).

(Feb 6, 2013 11:36 PM)Natecat33 Wrote: [\[CITE\]](#) You also imply that Pong AI is similar to the type of AI you would need for this project.

This project would not require any form of artificial intelligence. You are severely mistaken. I never at any given point in time "implied" that AI for a video game (pong) even closely resembles the unfathomable "AI" for this project.

(Feb 6, 2013 11:36 PM)Natecat33 Wrote: [\[CITE\]](#) I wrote pong once, and the AI took about 10 lines. This project would probably need thousands of lines of code just to parse the directions, not even mentioning solving complicated equations.

I'm glad you only wrote ten lines of code for your pong AI. Based on how you're presenting it (no known length of each "line"): You probably wrote a basic system-based AI for it.

This project wouldn't require 'thousands of lines of code.' Hahahhha. You musn't be very good with technical details. ?

Solving equations (I don't understand what you mean by "complicated") is a simple game of following rules: Something that humans fundamentally have a hard time computing; Where-as machines do not.

(Feb 6, 2013 11:36 PM)Natecat33 Wrote: [\[CITE\]](#) Comparing facial recognition to text analysis? Did you have something to say, or were you just commenting on the reality of the situation?

m0n0p0ly - February 6, 2013, 11:03 pm

I like the concept.

Good luck with this project.

Assume - February 6, 2013, 11:15 pm

If the problems that are being interpreted are standard math problems (not word problems) this wouldn't be that hard. Really all you would need to do is get it to be able to extract the text and then use Wolframalphas API to solve the problem.

FireSquid - February 10, 2013, 6:58 am

It would be extremely hard as every paper has to be exact and it would take time for a computer to analyze a paper as there would be different questions which results in months of coding

coll178 - February 10, 2013, 8:53 am

This could work until the user hit 6th grade. This would also screw up with word problems.

Teacher : "John had two apples and ate one What did you get as the answer (insert users name here)"

User : "Null"

Natecat33 - February 10, 2013, 7:51 pm

(Feb 6, 2013 11:50 PM)Irritable Wrote: [\[CITE\]](#) You are referring to basic text parsing. Those are not rare. They have been implemented decades ago. They are the entire basis of RPGs. My all time favorite: Zork (1980s).

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Solving equations (I don't understand what you mean by "complicated") is a simple game of following rules: Something that humans fundamentally have a hard time computing; Where-as machines do not.

Did you have something to say, or were you just commenting on the reality of the situation?Lolz, you are comparing a set of pre-defined commands to word problems that can have any amount of words. Solving simple equations would be very easy, but that would take away from the entire point, you might as well do your homework if it is just simple equations. The reality is most math questions will be algebraic, not simple. Also, this is supposed to solve more then just math problems, like I said, much harder to parse text then equations.

Nmanpure Pkr - February 11, 2013, 12:44 pm

It would be easier if you could scan it, this would be higher quality. Also you would be pretty lucky because most of the homework should be nice printed font. The hard part would be for the program to figure out what exactly it has to do.

ChineseFountain - February 11, 2013, 1:15 pm

I guess it'd be possible. OCR can be pretty tricky though. Often times you have to calibrate the system, matching letters to their images on the document.

VGM - February 11, 2013, 6:48 pm

I'd say that this is possible. Granted, not all fonts would work. But my scanner uses an API for OCR and picks up quite a lot. I could see this working in Definitions/Math homework. It would probably be more practical to make a sort of homework helper to throw relevant information at you and then you can decide if it looks correct or not. But as for printing out the answers it would look kind of silly if you printed out your calculus homework from a wolfram alpha type output. It would probably be encouraged to handwrite the output yourself.

Zabuza? - February 11, 2013, 7:49 pm

I don't think that this would work out..unless you scan the questions with a printer, and somehow code it to read them. You can try, but it will probably take a while if possible.

Cyrus - May 4, 2013, 7:08 am

This would be amazing, HackForums' best coders should start working on this, who ever makes this would make millions. I seen something similar except not as good as what your talking about and Yahoo bought the app from him for millions of pounds.

Here's a link to what I'm talking about: <http://www.bbc.co.uk/news/technology-21924243>

And I think it would be easier to code it so we type in the homework and it prints it out but if they could make it do it from a picture that would be even more amazing.

JavaProphet - May 4, 2013, 11:54 am

Practically, it's probably been done, and will be done many times over. All you need, is to scan the file into an image. Then determine all of the places where text is, record directions, based on semantics, and for instance, math problems. Enter them in an expression parser, then dump them at

an appropriate pixel position, either by a human-like font, or tell the user to write it down. It would be hard to accomplish for things like english, but still possible.

Chandler_01 - *May 4, 2013, 7:27 pm*

I've made a program that solves anything that we've done in chemistry over the course of this past year.

When my teacher found out (Yes. I did actually use it) he said i have to show the work. I told him "I'll make it show the work." He doesn't like me very much.