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An AI Is Finally Trouncing The World's Best Poker Players (cmu.edu)

Posted by EditorDavid on Sunday January 22, 2017 @06:34AM from the humanity-folds dept.

Halfway through the "Brains vs. AI" poker competition, an AI named Libratus is trouncing its human opponents, who are four of the world's top professional players. *One of the pros, Jimmy Chou, said he and his colleagues initially underestimated Libratus, but have come to regard it as one tough player. "The bot gets better and better every day," Chou said. "It's like a tougher version of us"...* Chou said he and the other pros have shared notes and tips each day, looking for weaknesses they can each exploit. *"The first couple of days, we had high hopes," Chou said. "But every time we find a weakness, it learns from us and the weakness disappears the next day."* By Saturday, the AI had amassed a lead of \$693,531 after 56,732 hands in the 120,000-hand match (which is being [livestreamed by the Rivers Casino on Twitch](#)). "I'm feeling good," said Tuomas Sandholm, the computer science professor at Carnegie Mellon who co-created the AI. "The algorithms are performing great. They're better at solving strategy ahead of time, better at driving strategy during play and better at improving strategy on the fly."

math poker classicgames

Geek Avenges Stolen Laptop By Remotely Accessing Thief's Facebook Account

Blackjack Player Breaks the Bank At Atlantic City

Two Years In Prison For Using Infrared Contact Lenses To Cheat At Poker

Researchers "Solve" Texas Hold'Em, Create Perfect Robotic Player

How A Professional Poker Player Conned a Casino Out of \$9.6 Million

NASA Names an Asteroid After 'Star Trek' Actor Wil Wheaton

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Score:

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0

Goal post (Score:3, Insightful)

by MervynRaphan (12484676) on Sunday January 22, 2017 @06:49AM (#53714667) Homepage

Cue the goal post shifting.

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Re: (Score:1)

by Anonymous Coward

It's not drivle, he's entirely correct. When computers were beating grandmasters at chess, the goalposts were shifted to Go. "Oh, computers will never beat a champion Go player in our lifetime, it's a far too complex game". When AI started beating top Go players, it became "oh, the board's too small, try it with a bigger board and you'll see the humans on top again". Look down below, already people are trying to argue the number of players in the game.

Re: Heads-up Texas Holdem (Score:3, Funny)

by Anonymous Coward

Thank God. All the poker playing jobs are safe for now.

Re:Heads-up Texas Holdem (Score:5, Insightful)

by geekmux (1040042) on Sunday January 22, 2017 @07:56AM (#53714801)

Heads-up (2 player) Texas Holdem is not the most commonly played version of poker. Most people play Texas Holdem in groups of 6 or 9 players. Working out an optimal strategy to beat multiple opponents is a LOT harder than beating a single player. We may have a dominant heads-up poker AI soon, but I would expect it to take several more years for a dominant multi-player to be created. Uh, several more years? Allow me to quote one of the poker players: "...every time we find a weakness, it learns from us and the weakness disappears the next day." Let's not underestimate the power of learning at damn near an exponential rate. I expect an AI multi-player tournament next year to crush human opponents. How quickly do you think an AI supercomputer could process every single hand of play that a professional poker player has ever made in their life to analyze and exploit every weakness to be able to predict behavioral patterns with great accuracy? Lather, rinse and repeat for the top dozen poker players in the world. How to get AI to beat humans in a game of finite limits and statistical values is not exactly a mystery. The largest mistake mankind could make is underestimating the speed at which AI will prove it can do a lot of things better, faster, and more accurately than any human could ever do. Underestimating that speed will greatly reduce our ability to properly prepare for a world of unemployable humans. tldr: Poker isn't dead, yet. AI beating humans at a game is merely a beta test. The real application will feed unending greed, which will never die.

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Re: (Score:2)

by Karganeth (1017580)

Uh, several more years?

Yes, years. Libratus uses 16 Terabytes of memory for just a 2 player game. The size of the game tree increases by at least a factor of 1000 when moving up to just 3 players. That's significantly more memory. Also the computations themselves take much longer when there's more than 2 players as something called "card removal" comes into effect.

Re: (Score:2)

by religionofpeas (4511805)

Not so long ago, people assumed that a world class Go playing computer would also take years to create, and all of of a sudden there was AlphaGo beating them.

Re: (Score:2)

by ranton (36917)

Yes, years. Libratus uses 16 Terabytes of memory for just a 2 player game. The size of the game tree increases by at least a factor of 1000 when moving up to just 3 players. This is why better algorithms are almost always a bigger factor than increased computing power when solving these problems. They won't solve playing against 3+ players with more RAM, they will solve it with better algorithms. By some cases algorithmic improvements can be 43 times more important than computing power improvements [johnndcook.com]. Considering this AI is already dealing with unknown information, I doubt the size of the "game tree" increases by the factor you cited as you add more players.

Re: (Score:2)

by igny (716218)

Re:

"...every time we find a weakness, it learns from us and the weakness disappears the next day."

Let's not underestimate the power of learning at damn near an exponential rate.

It does not look like AI learning at exponential time. It looks like nightly patches to a program to remove discovered exploits. Let us wait until "the weakness disappears immediately without any human intervention".

Re: (Score:2)

by mesterha (110796)

Where does it say anything about human intervention? The thing is learning while it sleeps.

Re: (Score:1)

by Anonymous Coward

Heads-Up Hold'Em is a completely different game than standard 9 Player Hold'Em. It's not just that there's 8 people to analyze, you also have to analyze the relationships between every player, which is constantly changing with the flow of the game. Player A crushed B who's on tilt and will be extra aggressive, or maybe B's on-tilt the other way scared and easy to push out of hands, or maybe player B will just shut down and not play anything at all. Then long-time friend C sits down which perks B up, and

Re: (Score:2)

by jbolden (176878)

Those types of games computers have been beating for years. Given irrational non-statistically valid play simply playing a boring statistical game works really well. Now of course as the M ratio goes up the game gets harder for both computers and humans but for computers faster. Given how easy an M ratio of 50-200 was solved and how small the bots were, solving 1000 or so when players are being irrational shouldn't be hard.

Re: (Score:3)

by Alomex (148003)

Let's not underestimate the power of learning at damn near an exponential rate. Except that you pulled that exponential rate out of your ass. AlphaGo which has by far the best record in self improvement, learns at a linear rate.

Re: (Score:2)

by AlanObject (3603453)

Heads-up (2 player) Texas Holdem Came here to say this. Also the real test is not against a 1 to 9 pro players. The real test is against a mix of really good players and a few who have no idea what they re doing.

AI? (Score:1)

by hcs_sreboot (1536101)

Do we need AI to play poker? A traditional program made by a dev well aware of both poker rules and probabilities should be more than enough to defeat mere humans.

4 hidden comments

Re: (Score:3)

by mwvdllee (775178)

Should it fold if the opponents bet outweighs the probability? If the AI uses probabilities, it itself becomes predictable and therefore trivial to beat. The game is setup to make you lose if you only play good hands, so there is no playing safe in poker. Probabilities in poker are nearly meaningless if you play against even half-decent amateurs.

Re: (Score:2)

by religionofpeas (4511805)

The solution is to combine probability calculations with unpredictable behavior.

Re: (Score:2)

by religionofpeas (4511805)

It's exactly what they are doing, so no, they haven't overlooked it.

Re: (Score:3)

by gweihir (88907)

Aaaand fail. I did write "strong/true AI" and hence you are the one that does not understand the "AI effect". Incidentally, the AI effect proves my point, because there are perfectly good terms for what often is called (non-strong/non-true) AI these days and hence there is zero need to call it AI. Pattern recognition, statistical classification, automation, etc. all far better terms than the entirely misleading unqualified "AI".

Re: (Score:2)

by religionofpeas (4511805)

Real intelligence is also just computation.

Re: (Score:2)

by gweihir (88907)

An unsubstantiated claim at best. At least actual Science claims no such thing.

Re: (Score:2)

by jbolden (176878)

Of course it does. More and more we are learning the mechanism by which simple brains work. They are reproducible in software.

Re: (Score:2)

by gweihir (88907)

No it does not. Read maybe some actual scientific results? The current scientific of how this works is "we do not know". That is for brains where actual intelligence can be observed. A fruit-fly, for example, cannot be called "intelligent".

Re: (Score:2)

by jbolden (176878)

You have been reluctant to define intelligent. I don't know what scientific results you are talking about. We are learning how brains work. We have been able to emulate simple ones. But there is no sign of some missing ingredient in what we are doing. The road we are looks promising.

Re: (Score:2)

by ceoyoyo (59147)

There is zero evidence that the brain is magic, even for low values of magic such as "quantum." Actual "Science" does regard the brain as performing computations, massively in parallel.

Re: (Score:2)

by gweihir (88907)

No, it does not. Actual science at this time says "we have no clue how this works". There is zero evidence either way and that makes the question open. Or have you forgotten that actual intelligence gets observed nowhere else? That alone makes a default to the physicalist explanation exceptionally non-scientific. Or maybe you think consciousness and intelligence are emergent properties of complexity? If so, that would be "magic" right there, because the whole cannot be more than the sum of its parts in physys

Re: (Score:2)

by lgw (121541)

This is not true/strong AI, You keep using that word. I do not think it means what you think it means. AI has always mean imitating intelligent behavior through clever algorithms. (Almost) no one researching AI is looking for machine consciousness - why would you want that? They're trying to solve real-world problems with engineering solutions. We want a self-driving car, not a self-aware car.

Re: (Score:1)

by gweihir (88907)

Look it up. It has a defined meaning.

Re: (Score:3)

by lgw (121541)

Bro, do you even dictionary [merriam-webster.com]? It does have a defined meaning of the term. It's not machine consciousness. For fucks sake, that's science fiction and only science fiction. It's not the common meaning of a defined. It's not what "AI researchers" research. It's fanwank. Get over it. 1 : a branch of computer science dealing with the simulation of intelligent behavior in computers 2 : the capability of a machine to imitate intelligent human behavior

Re: (Score:2)

by gweihir (88907)

Well, both "strong AI" and "true AI" are keywords in Wikipedia. It is defined (simplified) as the ability of a machine to perform "general intelligent action". There is no consciousness requirement, but a "generality" requirement. And that makes all the difference. Strong/true AI is AI that is not specialized for one tiny problem, but can solve general problems. Whether actual intelligence (whether natural or artificial) is possible without consciousness is an open question and besides the point for the curr

Re: (Score:2)

by jbolden (176878)

What in your opinion is the difference? How can I tell something that looks intelligent from something that is intelligent?

Re: (Score:2)

by gweihir (88907)

These are defined terms. They are not _my_ terms. Look them up before spouting complete nonsense.

Re: (Score:3)
by [tomhath \(637240 \)](#)
If it was real AI it would be self-aware. And the computer would be wearing mirrored sunglasses.

Re: (Score:2)
by [religionofpeas \(4511805 \)](#)
Self awareness is only a small part of intelligence. Our brains do a lot of processing that's not self aware.

Re: (Score:3)
by [lgw \(121541 \)](#)
If it was real AI it would be self-aware.
No, that just not what "AI" means, any more than "sentient" means self-aware. Science Fiction keeps abusing those terms, but they have mainstream meanings. AI is clever algorithms that imitate intelligent behavior. Which means it could still be wearing mirrored sunglasses.


Re: (Score:2)
by [ceoyoyo \(59147 \)](#)
Ironically, modern neuroscience is beginning to find evidence that your self awareness might consist in large part of your conscious simply being told of decisions that your subconscious has already made. Disturbing thought, isn't it?

Re: (Score:2)
by [jbolden \(176878 \)](#)
A static system fails to good play. Take the most common situation, computer is in the big blind (i.e. you had a forced blind bet before you were dealt). 1/2 the hands dealt will be less than average. Folding a raise with a substandard hand subsidizes your opponent almost always raising regardless of his cards. So you can't fold. Calling a raise with a substandard hand subsidizes your opponent better hands, he raises when he is good and mucks when he isn't. So you can't call. Reraising with substanda


Sounds boring (Score:1)
by [alzoron \(210577 \)](#)
Without the psychological aspect of staring your opponents in the face it's just a calculation of odds. Takes most of what makes poker poker out of the equation.

Re: (Score:2)
by [ceoyoyo \(59147 \)](#)
Actions speak louder than professional poker faces. Professional poker players pay attention to the betting histories, both in the current game and over longer time periods, of their opponents. That information is also available to the computer.

Important milestone (Score:5, Interesting)
by [Mostly a lurker \(634878 \)](#) on Sunday January 22, 2017 @06:59AM ([#53714691](#))
Unlike with games like Chess (best moves can be precisely calculated) and Backgammon (simple probabilities), Poker requires adapting to human behavior, indeed varying your play depending on what you learn about your opponent. The techniques are going to be applicable to a wide range of situations. For instance, I will go so far as to claim that we will shortly be wise to use an AI to advise us on investment decisions. (In the past, the computer has been used for speed, and reacting to subtle market signals, but not so much for long term investment planning.)
The next challenge is going to be independent learning. I believe human experts still supervise the learning process of all the best AIs. Once the need for the human adviser goes away, AIs are literally going to be everywhere. Your phone AI will recognize and react to your current mental state, as well as help you overcome everyday problems. The AI in your fridge could become a huge help in keeping you compliant with your diet plans.

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Re:Important milestone (Score:4, Insightful)
by [gweihiir \(88907 \)](#) on Sunday January 22, 2017 @07:11AM ([#53714717](#))
Basically, it is the skill to con a human. I see great reprehensible applications in advertising, manipulation of elections and other fields of human-created evil.

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Re: (Score:1)
by [Visarga \(1071662 \)](#)
Poker is not a natural language game, so we're safe yet.

Re: (Score:2)
by [gweihiir \(88907 \)](#)
Well, maybe. Combine Watson with this and that may change.

Re: (Score:2)
by [wbr1 \(2538558 \)](#)
I'm sorry Dave, I can't let you eat that doughnut. Fatass.

Re: Important milestone (Score:2)
by [Pros_n_Cons \(535669 \)](#)
Dave's not here man.

Re: (Score:2)
by [wbr1 \(2538558 \)](#)
You took my 2001 A Space Odyssey and went all Cheech and Chong on it man. Not sure if that is cool or harshing my mellow.
God, I'm old.

Re: (Score:2)
by [Karganeth \(1017580 \)](#)
That's not true. Poker does not require adapting to human behaviour. Just like in chess, poker AIs are always thinking about the best possible counter to their moves and trying to come up with a strategy to that (this process is repeated many times). No understanding of human behaviour is needed, an I expect that Libratus has no code in it whatsoever that adapts to the opponent it is playing.

Re: (Score:1)
by Anonymous Coward
If you find a Nash equilibrium for a finite two person zero sum game, then you can't lose in the long run and you never adapt to the other person's strategy---you just play the Nash equilibrium strategy. In limit two person holdem, the Nash equilibrium was found by the University of Alberta (<http://poker.srv.ualberta.ca>). That strategy did not adapt to the human players. On the other hand, in the July 2015 video <https://www.microsoft.com/en-us/research/video/the-state-of-techniques-for-solving-large->

Re: (Score:2)
by [arobatino \(46791 \)](#)
Unlike with games like Chess (best moves can be precisely calculated)
True in theory, but in practice the search space is too big.

Re: (Score:2)
by [ColdWetDog \(752185 \)](#)
"August 4, 1997, and it began to learn at a geometric rate. At 2:14 a.m., EDT, on August 29, it gained artificial consciousness, and the panicking operators, realizing the full extent of its capabilities, tried to deactivate it."
Yeah, well, the movie was a bit ahead of its time....


the next thing is the skynet or joshua (Score:2)
by [Joe_Dragon \(2206452 \)](#)
Just don't hook it up to any missile command system.

Re: (Score:2, Insightful)
by [ledow \(319597 \)](#)
Poker doesn't.
It just has a larger search space.
We've only just got to the point where Chess is beatable, very recently in computing terms.
We've only just seen a tiny glimpse that Go may be beatable. Google's AI is literally leaps-and-bounds ahead of the game in that respect as the search space is so much unbelievably huger than chess that chess is laughable in comparison.
The search space for poker - the card game - is complete. We know it exactly, down to the probability of everything. What we don't hav

Re: (Score:2, Flamebait)
by [epine \(68316 \)](#)
Google's AI is literally leaps-and-bounds ahead of the game in that respect as the search space is so much unbelievably huger than chess that chess is laughable in comparison.
Most people are too nice to point this out, but what you just wrote here amounts to waving a bright red "I'm an idiot" flag.
Consider this: the search space of Go 25x25 is so much unbelievably huger than Go 19x19 that Go 19x19 is laughable in comparison.
But wait, I'm not done.
Consider this: the search space of Go 37x37 is so much unbeli

Re: (Score:2)
by [religionofpeas \(4511805 \)](#)
Putting aside your silly examples, would you agree with parent that Go is a much more complex game than chess, even if judged by other criteria than game tree size ?

Re:Important milestone (Score:4, Interesting)
by [lgw \(121541 \)](#) on Sunday January 22, 2017 @02:42PM ([#53716405](#)) [Journal](#)
Not as humans play it. You don't play the early game, or any area where pieces are sparse, by exhaustive analysis, but that's where the mechanical search space would be largest. (Much like humans don't play the endgame in chess that way.) "Complexity" of the naive search space, before even the most basic pruning, isn't an interesting measure.
Playing as humans play, the early game in chess is more complex than go, the midgame is similar, the endgame is much more complex in go. Go is harder to write a bot for, because chess is more complex in ways that are hard for humans, while go is more complex in ways that are hard to program. Does that make it a "more complex game"? Maybe - it's all down to definitions.

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Re: (Score:2)
by [ceoyoyo \(59147 \)](#)
When you're excoriating someone, particularly on the Internet, you really shouldn't use words you've only ever heard. A cantor is someone who leads people in singing. I think you meant "canter" which is a quadrupedal gait between a trot and a gallop.

AI investment will be interesting (Score:2)
by [rsilvergun \(571051 \)](#)
since most stock "advisors" are actually salesmen who get commissioned for pushing certain stocks (and IIRC they'll even tell you that, albeit with the weaseliestly words possible).

What worries me is that this is another case of increased efficiency in our economy. Inefficiency is a huge part of what keeps it all going. Now, it's certainly true that it's ridiculous to pay people to break windows to employ window makers; but I'm not convinced we're going to have anything for those window makers to do if t

Re: (Score:2)
by [lgw \(121541 \)](#)
As you increase efficiency, people can buy more fore the same money, so it evens out. Looked at a different way, set the notion of money aside: what we consume is what we produce (assuming an efficient market, so we're not producing stuff no one wants). More production will always mean more consumption. More efficiency just means more production, because we as consumers are never satisfied.
Of course, times can get turbulent as jobs move to new areas faster than people can retrain, and this certainly isn'

Re: (Score:2)
by [ceoyoyo \(59147 \)](#)
There was a story on Slashdot a while ago about the world's largest hedge fund replacing their fund managers with computers. That's not really that impressive though, since many studies have shown you can replace fund managers with monkeys flipping coins and get the same performance. Many of the best learning systems are currently taught in an unsupervised way. They're fed stimuli and form their own internal model. Finally they're given a minimum of supervised training. Like a baby gazing around at the wo

Card counting? (Score:2, Offtopic)
by [bluegutang \(2814641 \)](#)
Isn't card counting such an effective way to win at poker that casinos ban it? And shouldn't a poker AI count cards pretty much by default? So no wonder it's effective.
[1 hidden comment](#)

Re: (Score:2)
by [lmtrik \(148191 \)](#)
Card counting is for blackjack and is ineffective for all but the best at it. Casinos ban it because doing so encourages people to lose money trying and so they can get rid of the rare person that's good at it without any trouble.

Re: (Score:2)
by [CptLoRes \(4510239 \)](#)
Playing in Casinos is more like a IQ test. Only idiots and the few exceptional bright would play a game where everything is in the houses favor and the house can change the rules as they see fit.

Re: (Score:2)
by [lmtrik \(148191 \)](#)
The house can't change the rules as they see fit, at least for legal casinos. About the worst they can do is give you your winnings and throw you out. Sometimes, particularly with slots, you find cases where the players didn't fully understand the rules of the game.
As for it being an IQ test, only idiots and the few exceptionally bright people would play a game in the house's favor *and expect to win*. If you expect to lose and do it as entertainment, it gives similar value to a lot of other forms of ente


Re: (Score:2)
by [ledow \(319597 \)](#)
Depends on the variant. Poker is a game which you can graph pretty easily, with probabilities for "unknown" hands.
The problem is not the card game, but the betting. You have many possibilities on how to bet and when to bet and that explodes the game graph. This AI has the betting in hand, not the card game (the latter is easy but in an incomplete-knowledge game like Texas Hold'em isn't enough on it's own).
And there are STILL people, on here and other sites, that give you the "human element" bollocks beca

Re: (Score:2)
by [fluffernutter \(1411889 \)](#)
So then it's not playing like a human. It's still playing like a computer, and yeah, we all know computers can calculate statistics better so there is no real news here.


I wouldn't make it public (Score:1)
by [igfenix \(2584513 \)](#)
I would use it to earn money.

Re: (Score:2)
by [ledow \(319597 \)](#)
How do you know there aren't already thousands of these things out there doing just that?

Nice (Score:2)
by [Impy the Impiuos Imp \(442658 \)](#)
What if...wha...oh. What if Trump's entire campaign is driven by an AI?
"Now dispute crowd sizes. Celebrities and news media will double down on their loud Hollywood mouths. It matters little in the short run but builds background distrust of them. This will be used in 4 years."

Libratus vs. DeepStack? (Score:3)
by [starless \(60879 \)](#) on Sunday January 22, 2017 @10:32AM ([#53715295](#))
So, will Libratus play against DeepStack (from the University of Alberta etc.), which also claims to be able to beat professional level humans...?
DeepStack: Expert-Level Artificial Intelligence in No-Limit Poker
DeepStack becomes the first computer program to beat professional poker players in heads-up no-limit Texas hold'em
<https://arxiv.org/abs/1701.017...> [arxiv.org]
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Online Poker Turing test? (Score:5, Insightful)
by [mystik \(38627 \)](#) on Sunday January 22, 2017 @11:45AM ([#53715629](#)) [Homepage](#) [Journal](#)
I've never used an online gambling site, but doesn't the existence of this AI kill off the fairness of these sites?
If a user is running this in his or her basement, wouldn't it pay more to just babysit the AI, acting on all the human-check capchas the sites deploy, and just doing what the AI decides?
This makes online poker effectively gold farming?

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Re: (Score:3)
by [quantaman \(517394 \)](#)
The online poker sites have software that does its best to prevent bots from playing. It's also against their terms of use. It doesn't stop everyone, but it does prevent a lot of bot play.
Have two machines running side by side. Input game state from the poker site machine into your bot, and enter the moves from your bot into the poker site machine.
It's pretty much impossible to prevent unless you can algorithmically detect computer style play, or simply decide a user at a certain level is too good to be human.

Re: (Score:2)
by [alexo \(9335 \)](#)
The online poker sites have software that does its best to prevent bots from playing.
It's pretty much impossible to prevent unless you can algorithmically detect computer style play.
Which is a part of what those algorithms do, try to detect patterns that would indicate a non-human decision maker.
Obviously, as the AIs become more sophisticated, so must the detection algorithms. However, if the algorithm's play becomes so human-like that it defeats all attempts to distinguish it from that of an actual human (essentially passing the Turing test), would it still have an advantage over a human?
It is similar to the situation that we have in chess. Current algorithms running on consumer lev

Re: (Score:2)
by [quantaman \(517394 \)](#)
However, if the algorithm's play becomes so human-like that it defeats all attempts to distinguish it from that of an actual human (essentially passing the Turing test), would it still have an advantage over a human?
Yes.
Not all humans are equal, if my algorithm's play is indistinguishable from a really good human then I'll still make a lot of money.

Re: (Score:2)
by [rickb928 \(945187 \)](#)
And a deserved end to online poker.
And virtually every other online or Internet based game. AI will rule, and humans will only tolerate verifiable human opponents.

• **Performance per watt and other metrics (Score:1)**
by [KBentley57 \(2017780 \)](#)
I think it's fantastic that we're making progress with 'smart pattern matching'. However, I still get disappointed when I read the hardware specs required to do so. Imagine for a moment: 5 humans competing in a highly complex game with several hundred inputs to each player; spatial, acoustic, thermal, temporal etc. The complex task of facial recognition of multiple players, and how that relates to our 'operating system'. Hiding your own emotions, doing the best you can with statistics, the sounds, the

• **Not so good after all. (Score:5, Funny)**
by [PPH \(736903 \)](#) on Sunday January 22, 2017 @12:17PM ([#53715761](#))
Libratus has a poker tell. His CPU fan speeds up whenever he gets a good hand.

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• **I can load this AI onto my smartphone (Score:1)**
by [ayesnymous \(3665205 \)](#)
and bring it to the casino?

• **Re: (Score:2)**
by [mrclevesque \(1413593 \)](#)
“Hillary Clinton I think is a terrific woman,” he told Greta Van Susteren. “I am biased because I have known her for years. I live in New York. She lives in New York. I really like her and her husband both a lot"

• **Re: (Score:2)**
by [tomhath \(637240 \)](#)
hey shut down a program of the foundation
Yea, the program that was using foundation money to buy Hillary the Oval Office.

• **Re: (Score:2)**
by [ColdWetDog \(752185 \)](#)
No, we did.

• **Re: (Score:3)**
by [ledow \(319597 \)](#)
<https://www.twitch.tv/libratus...> [twitch.tv]
It's in the damn article if you read it.

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