The Go Files: champion preps for \$1 million machine match

Nature reports from a battle of man vs computer over the Go board.

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Google DeepMind

Demis Hassabis (left), the CEO of Google DeepMind, and Lee Sedol (right), one of the world's top Go players, at the press conference in Seoul.

Tanguy Chouard, an editor with Nature, saw Google-DeepMind's AI system AlphaGo defeat a human professional for the first time last year at the ancient board game Go. This week, he is watching top professional Lee Sedol take on AlphaGo, in Seoul, for a \$1 million prize.

I'm at the Four Seasons hotel in Seoul, where tomorrow Lee Sedol, one of the strongest players in the world at the board game Go, will take on the Al computing system AlphaGo. (You can watch the first match on 9 March from 13:00 KST/04:00 GMT, or 23:00 ET on 8 March, at the livestream below). Media excitement is high: hundreds of journalists were bursting with detailed questions and flash cameras at the press conference this morning.

Although some of the fervour may be manufactured for the television cameras – if you believe the interviews we've been shown, every man, woman and child on Seoul's streets is rooting for Lee – it's still amazing for me to see that the game will be screened live on television throughout Asia. I've been told by Fan Hui – the professional Go player whom AlphaGo historically defeated last October – that in China, 14 television channels plan on covering the match, and each has hired its own professional player to provide commentary.

Lee himself seems remarkably relaxed about the whole occasion. At tonight's hotel dinner he was all smiles, sitting with his wife and daughter, and sipping wine and coffee. But that's probably a deliberate strategy. Playing good Go is all about managing one's stress, Fan says.

Read more of Tanguy's blog at **The Go Files**.

Lee told journalists this morning that, with no way of analysing the mood or sentiment of his opponent as he'd normally do ahead of a match, he's instead preparing by playing through long games in his mind each day. He and AlphaGo will be given two hours to play their moves at any pace before they receive time-controls that restrict them to only one minute per move (Hui's games last October were shorter: one hour each before time-controls).

Who will win?

A few weeks ago, Lee was saying that he expects to beat the computer 5-0 – or perhaps 4-1. But at this morning's hour-long press conference, he said that after seeing Demis Hassabis – the CEO of Google-owned company DeepMind that created AlphaGo – presenting how the AlphaGo system worked, he felt a little more nervous. "I could be in danger now," he said, speaking through a translator.

Top Go players, such as Kim Myung-wan from South Korea, seem confident that Lee can win. Kim has analysed last October's games in which AlphaGo defeated Fan Hui 5-0, and says that that AlphaGo imitates the pattern-obsessed style of older professional players – which may betray the Al system's reliance on a bank of human moves.

"AlphaGo is not creative," Kim says. He and other 9-dan professionals say the new, young and vibrant Korean school has brought a huge amount of new creativity to the game. Lee has undoubtedly benefited from the social dimension of Korea's schools for 'baduk' (as Go is known in South Korea), in which players analyse games together as a group. Although AlphaGo is continually playing against itself, Kim doesn't feel it can improve enough to overcome that advantage.

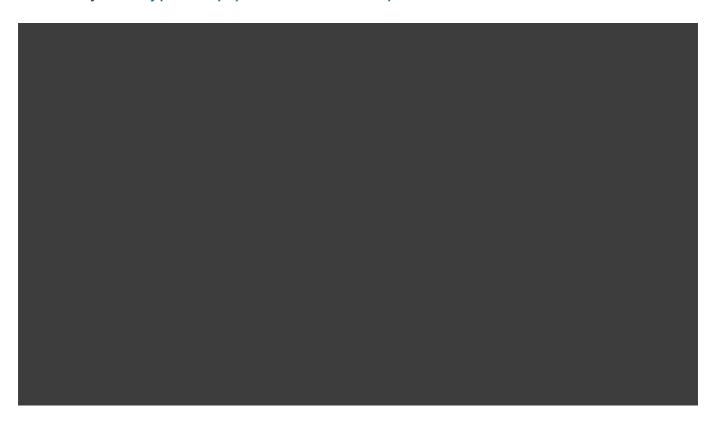
But David Silver, a computer scientist with DeepMind who's led on their development of AlphaGo, thinks the Al system is creative. The

more it plays against itself, the further it drifts away from moves that resemble those in the database of games it was originally trained on, he told me at dinner tonight. Silver thinks professional commentators don't realise how creative the system has become. And while Kim and others have spotted mistakes in Fan Hui's play, Silver suggests that AlphaGo pushes its opponents into such errors.

But Silver is definitely not hoping that AlphaGo wins because of mistakes. Everyone here from DeepMind and Google just wants to see a great game against Lee. "I sincerely hope that he plays really, really well," Silver says.

I can't wait for tomorrow: come back here for my thoughts on the first game.

Previous entry: 'Humanity-packed' Al prepares to take on world champion



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