

# Golaxy Brief Introduction



Golaxy is an AI program of Go developed by Beijing Thinker Technology Ltd. It has won the champion of World AI Go Open Tournament and is far ahead of the best human players. Golaxy aims to become a more general and humanized AI Go with less computing resources. The developers innovated on the structure of deep learning models, so that Golaxy could point target just like humans. During a game, the program could optimize the points and win rate simultaneously, which is to avoid making a concession when it has gained a big advantage. Moreover, it also applies transfer learning method to train the AI under specific komi and board sizes to adapt any board size and komi settings.

Golaxy was preliminarily developed by Beijing Thinker Technology Ltd. in April 2018. It continues to evolve in the following 6 months and has achieved impressive results in the competition against top human players and other high level AI programs,



Golaxy Team

On April 27, 2018, Golaxy played against Ke Jie (9 dan, 5 times world champion) in First Wu Qingyuan Cup World Woman Go Tournament and 2018 Berry Genomics

Cup World AI Go Competition. Golaxy played black piece and won after 145 moves. This game is seen as the most influential game between AI and human player since the match between Ke Jie and AlphaGo.



Golaxy creator Jin Xing and World Champion Ke Jie

Before playing against Ke Jie, Golaxy has played white with no komi against professional players in 30 games, and got 28 wins and 2 losses. It has defeated many high level players such as Zhou Ruiyang, Fan Tingyu and Pak Jeong-hwan etc. After the match with Ke Jie, Golaxy played against many other master-hands, such as Shi Yue, Jiang Weijie, Cui Zhehan, Won Seong-jin and Zhou Junxun etc. and got 40 wins and 1 loss in 41 games, reaching a win-rate of 97.6%.

In July 2018, Golaxy won the second place in 2018 Tencent World AI Go Competition and got 200,000 RMB prize.

From August 13<sup>th</sup> to 15<sup>th</sup>, 2018, 2<sup>nd</sup> World AI Go Open Tournament was held in Nanning. Golaxy defeated high-level AI from China, the United States, Japan and South Korea and won 450,000 RMB prize

On September 11-13, 2018, Golaxy, represented Chinese AI, participated in the 4<sup>th</sup> Eastern Economic Forum in Vladivostok, Russia. Sergey Gorkov, head of Russia's state-owned development bank, Vitaly Verkeenko, mayor of Vladivostok, Martin Stiassny, Chairman of the European Go Federation, Vitaly Nesis, director of Polymetal has played against Golaxy.



Left to right: Jin Xing, Sergey Gorkov, Vitaly Verkeenko, Martin Stiassny.  
2nd row, wearing scarf: Vitaly Nesis

On September 17, 2018, Golaxy was invited to participate in the World AI Conference in Shanghai. Liu He, the Vice Premier of the State Council, visited Golaxy's booth and asked about the difference between Golaxy and AlphaGo. And he played against Golaxy with great interest.



Liu He, the Vice Premier of the State Council, play against Golaxy (2nd right, first row: Liu He; 3rd right, first row: Miao Wei, minister of industry and information technology; 4th right, first row: Ying Yong, Mayor of Shanghai; 1st right, first row: Jin Xing)