Machine learning as a concept has been around for quite some time. The term "machine learning" was coined by Arthur Samuel, a computer scientist at IBM and a pioneer in AI and computer gaming. Samuel designed a computer program for playing checkers. The more the program played, the more it learned from experience, using algorithms to make predictions.

As a discipline, machine learning explores the analysis and construction of algorithms that can learn from and make predictions on data.

ML has proven valuable because it can solve problems at a speed and scale that cannot be duplicated by the human mind alone. With massive amounts of computational ability behind a single task