



1950

BRITISH MATHEMATICIAN ALAN TURING ASKS 'CAN MACHINES THINK?' IN HIS GROUND-BREAKING PAPER, 'COMPUTING MACHINERY AND INTELLIGENCE'.

1974-80

FIRST 'AI WINTER'. PROGRESS SLOWS AS COMPUTING POWER ISN'T GOOD ENOUGH, AI CAPABILITIES REMAIN LIMITED, AND INTEREST FADES.

1993 - 2023

PROGRESS IN RESEARCH AND INCREASED TECHNOLOGICAL CAPABILITIES SEE DEVICES SUCH AS SMARTPHONES, ALEXA AND CHATGPT ENTERING EVERYDAY LIFE. SUDDENLY, AI IS 'HOT' AGAIN.



1950-70

HIGH LEVELS OF INTEREST IN AI. MANY OF THE TERMS AND TECHNIQUES WE STILL USE TODAY ARE FIRST DEVELOPED IN THIS PERIOD.

"1980-87"

THE 'AI BOOM'. FUNDING FLOODS IN AGAIN FOR AI RESEARCH AS BREAKTHROUGHS ARE MADE. FOR THE FIRST TIME, COMPUTERS CAN 'LEARN FROM THEIR MISTAKES'.

1987-93

SECOND 'AI WINTER'. INVESTORS SEE AI AS HIGH COST AND LOW RETURN, SO INTEREST DRIES UP AGAIN.

TODAY

NOVEMBER 2023 - FIRST GLOBAL AI SAFETY SUMMIT. HOSTED BY THE UK GOVERNMENT AT BLETCHLEY PARK - THE HOME OF WWII CODEBREAKERS INCLUDING ALAN TURING.



WHAT NEXT?

AI TIMELINE



ARTIFICIAL INTELLIGENCE IS ALREADY HERE!

FROM YOUR SMARTPHONE OR YOUR NETFLIX RECOMMENDATIONS TO THE ITEMS IN YOUR SHOPPING CART- ANYTHING THAT 'PERSONALISES' AND 'LEARNS' ABOUT YOU IS ALREADY USING AI.

WHAT IS AI?

YOU CAN THINK OF AI AS A REALLY GOOD CALCULATOR. IT'S NOT 'INTELLIGENT' IN THE WAY YOU OR I ARE - IT'S JUST VERY GOOD AT CRUNCHING A LOT OF NUMBERS VERY QUICKLY. IT CAN ONLY MAKE SENSE OF ANY OTHER PART OF THE WORLD IF WE HELP IT TRANSLATE THE WORLD INTO NUMBERS, AND THEN TRANSLATE THE NUMBERS INTO ACTIONS.

WHO IS BUILDING AI?

THE BIGGEST DRIVERS OF LARGE-SCALE AI RESEARCH ARE THE PEOPLE YOU EXPECT - GOOGLE, APPLE, FACEBOOK, AMAZON, AND MICROSOFT. HOWEVER, AI RESEARCH IS ALSO TAKING PLACE IN UNIVERSITIES AND A HUGE NUMBER OF SMALLER COMPANIES. THIS WORK OFTEN FOCUSES ON BUILDING AI TOOLS FOR A SMALL NUMBER OF TASKS, LIKE IDENTIFYING CANCERS, HELPING AIR TRAFFIC CONTROL OR DIRECTING SELF-DRIVING CARS.

WHY COULD WE WANT IT?

IN THE FUTURE AI COULD GIVE EVERY STUDENT IN THE WORLD A PERSONAL TUTOR, SIGNIFICANTLY REDUCING THE GAP IN EDUCATION EQUALITY. IT COULD ALSO HELP US DIAGNOSE DISEASES EARLIER AND DEVELOP NEW DRUGS TO TREAT THEM, REDUCE TRAFFIC, PROVIDE EARLY WARNINGS OF NATURAL DISASTERS, AND A RANGE OF OTHER USES.

WHY MIGHT WE FEAR IT?

AI CAN LEAD TO HARMS - EITHER BECAUSE WE SET IT UP IN THE WRONG WAY, GAVE IT THE WRONG TASK OR DIDN'T CONSIDER WHAT DATA THE AI IS USING. IT COULD ALSO DELIBERATELY BE USED FOR WRONG - FOR EXAMPLE BY DEVELOPING WEAPONS THAT CAN SELECT TARGETS WITHOUT HUMAN INTERVENTION. OR TOOLS MEANT FOR FINDING NEW DRUGS COULD BE USED TO DEVELOP NEW BIOLOGICAL WEAPONS INSTEAD.