

Figures to Accompany Uncontrollable



Figure 2.1 An AI generated image of a cute cat flying an old plane. Note the detailed resolution but also the missing propeller blade.

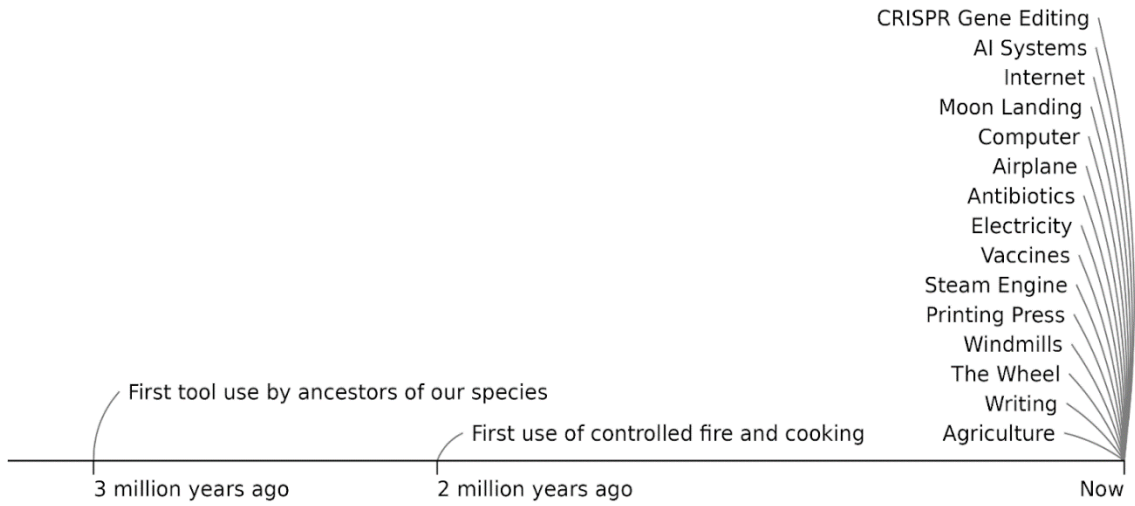


Figure 5.1 When charting humanity’s technological achievements over the past three million years, nearly all of them happened near the present.

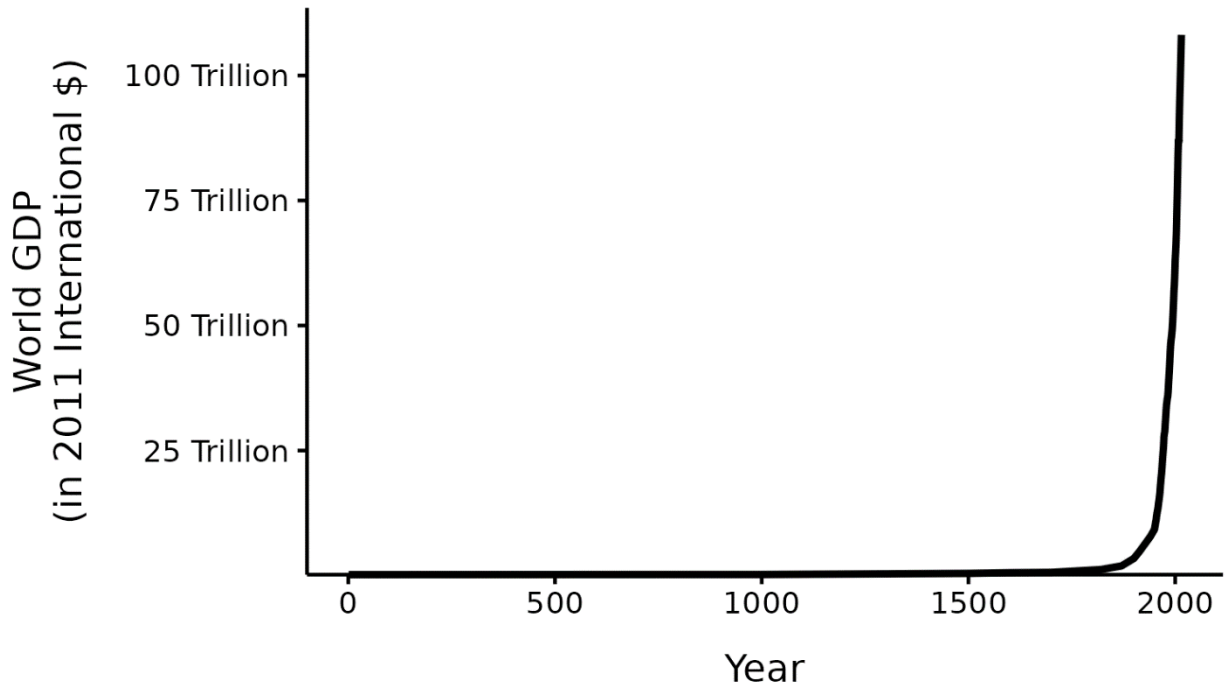


Figure 5.2 World gross domestic product (GDP) over the past 2000 years shows a steep increase in the past couple hundred years.

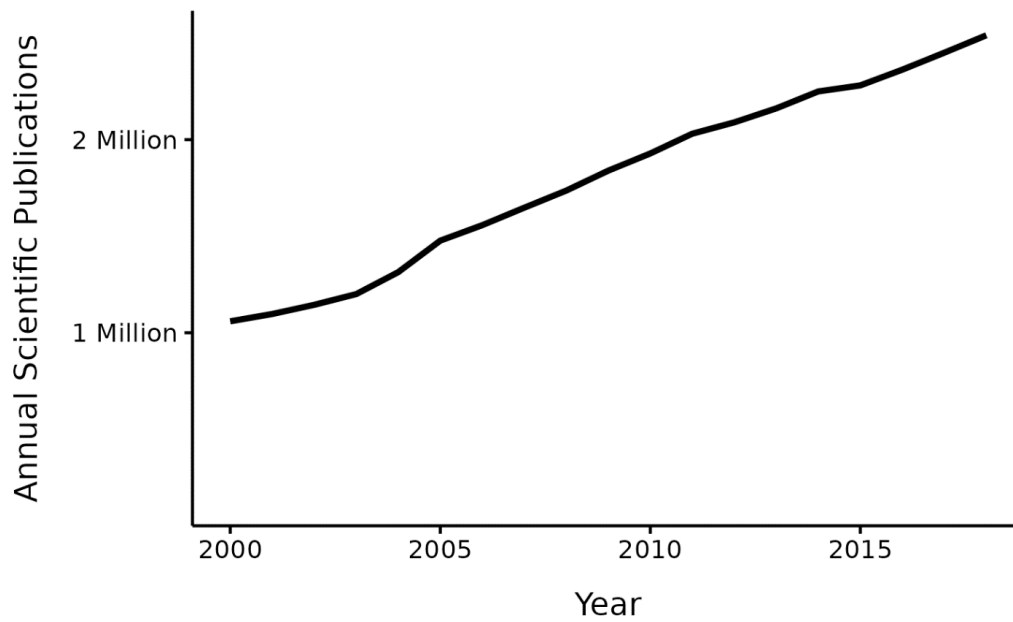


Figure 5.3 The number of scientific publications each year was approximately three million in 2020, up from one million at the turn of the millennium.

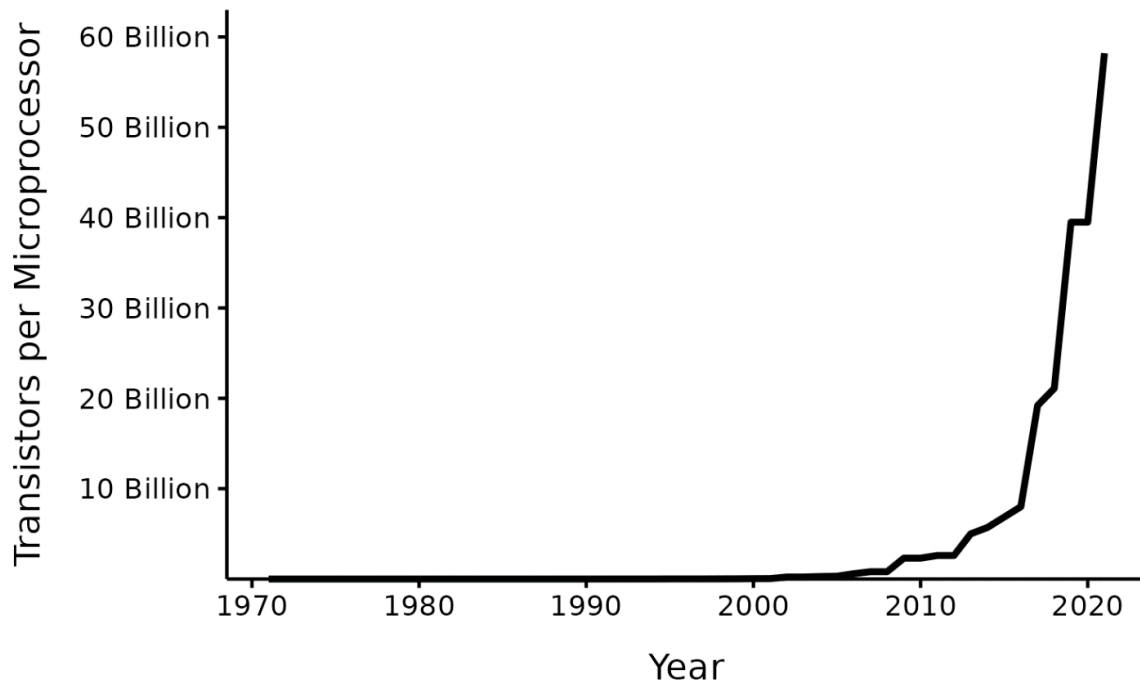


Figure 5.4 The number of transistors per microchip has gone through staggering growth over the past sixty years. Recent absolute growth is so high, it is hard to see earlier growth on this chart.

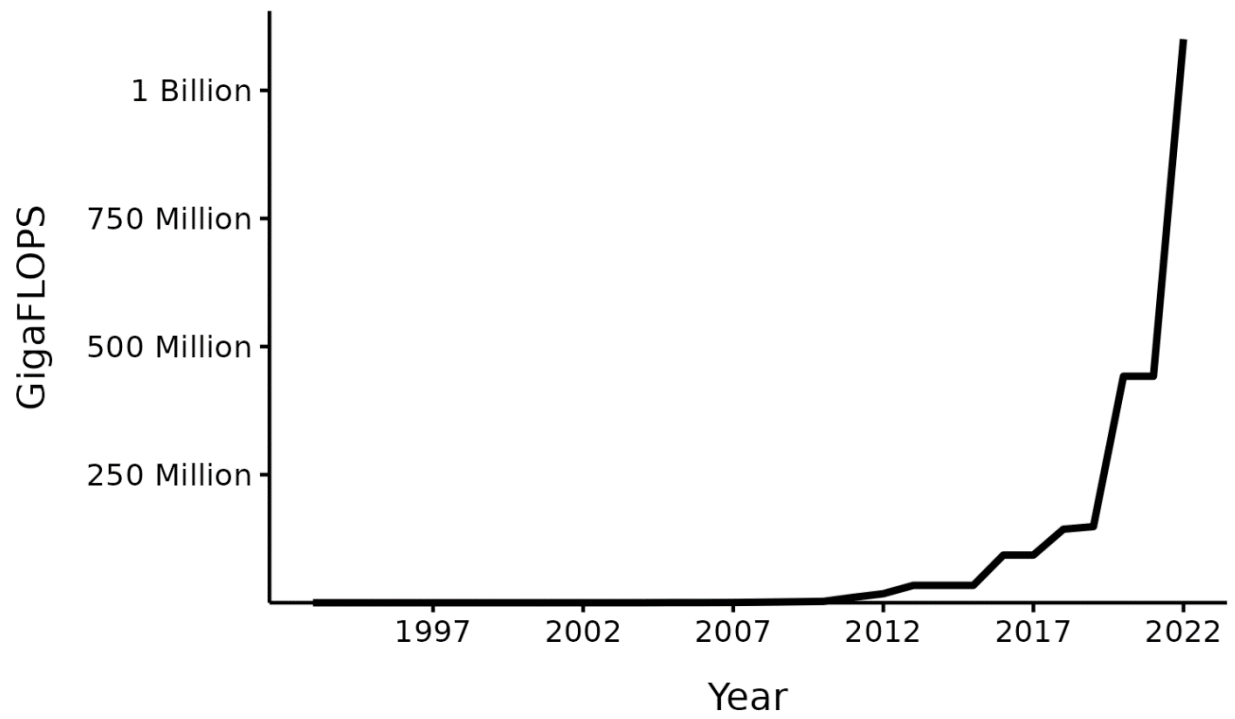


Figure 5.5 The computation capacity of the most powerful supercomputers has risen steeply over the past decade, reaching a billion billion floating-point operations per second.

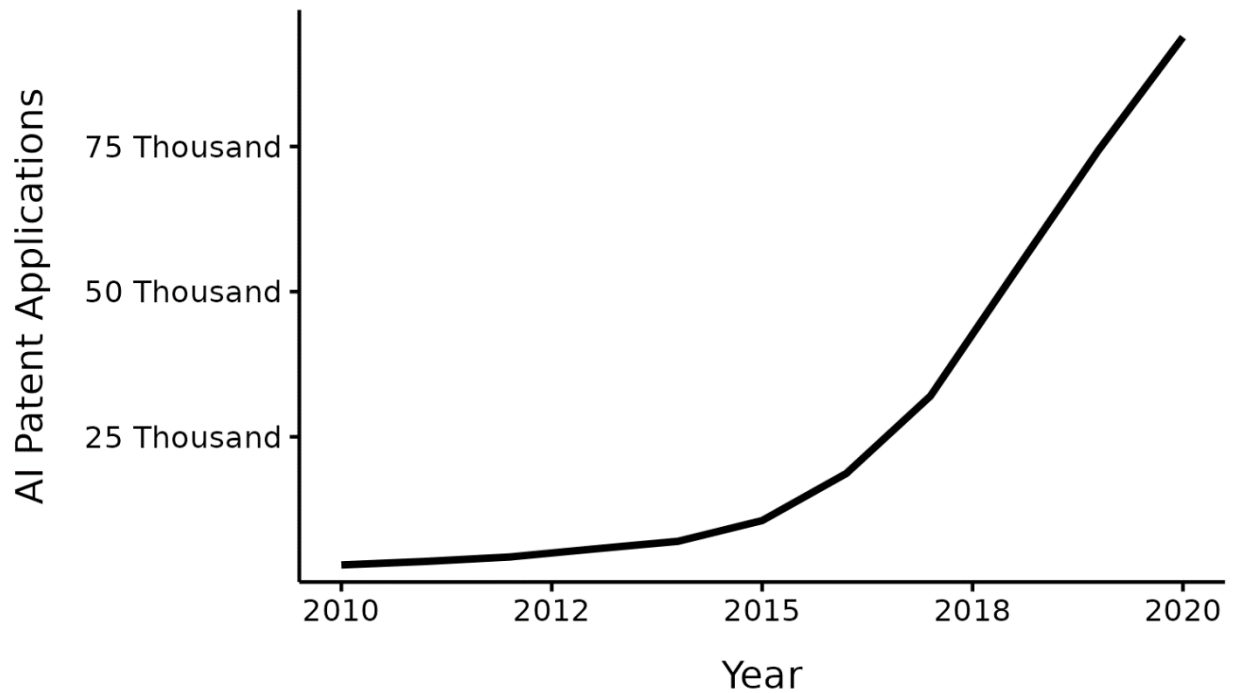


Figure 5.6 The number of AI patent applications has increased exponentially since the early 2010s.

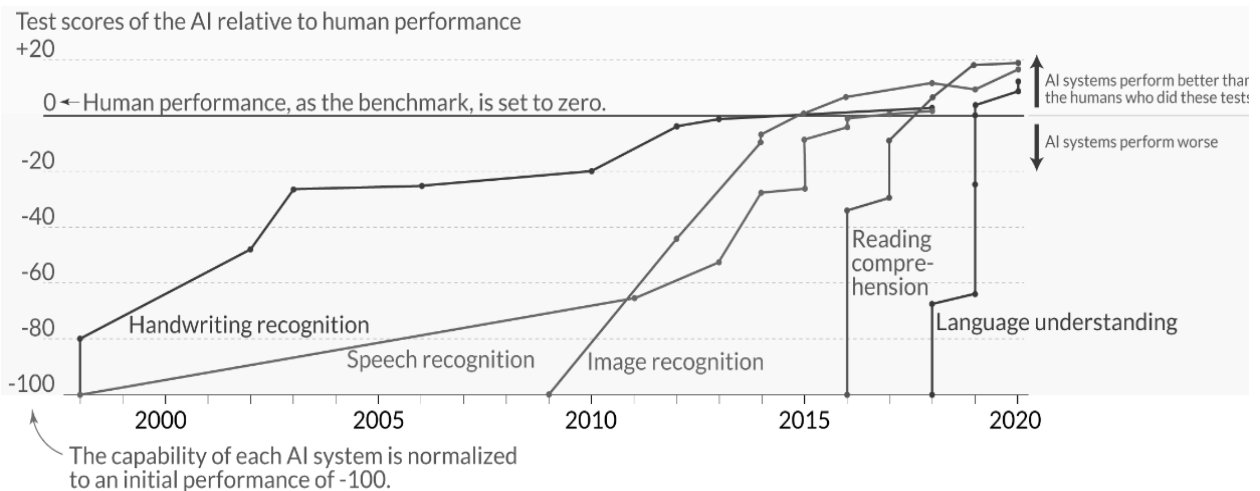


Figure 5.7 Since the 1990s, AI systems have made progress on reaching and then surpassing human-level performance in domains such as handwriting recognition, image recognition, and language understanding. Over time, the rate of progress appears to have increased.

Simulated Exam	GPT-4	GPT-3.5
Uniform Bar Exam	90th percentile	10th percentile
LSAT (test for entering law school)	88th percentile	40th percentile
SAT Math	89th percentile	70th percentile
Graduate Record Examination (GRE) - Verbal	99th percentile	63rd percentile
AP Biology	85th-100th percentile	62nd-85th percentile

Figure 5.8 This chart shows that GPT-4 vastly improves upon GPT-3.5 in numerous domains such as examinations on law, math, verbal ability, and biology.