# THE GRIFFIN EMERGING TECHNOLOGY STARBURST 2024 EDITION . WHAT WILL YOU #DISRUPT?

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### STARBURST KEY

Est. Technology Maturation Date

General Purpose Technology

## WELCOME FROM @311INSTITUTE

The 311 Institute is a global Futures and Deep Futures advisory, strategy, and innovation firm, and our mission to democratise access to the future and help people realise their exponential potential.

Now in its ninth year the Griffin Emerging Technology Starburst is used by organisations all around the world to help them keep track of the companies and products.

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### LOOKING BACK AT 2023

In 2023 there were fewer technology world firsts than 2022 but triple the number of new emerging technologies spotted. Biotech, Energy, and Materials saw the biggest gains with Compute, Intelligence, Security, Sensors and User Interfaces seeing more modest gains, and notable breakthroughs included: 5 hour human gene sequencing • Al beat humans at drone racing • Al discovers 200 new CRISPR-like systems & 380,000 compounds • Analogue Al & computer chips • Brain navigating microbots • Cancer killing nanorobotic swarms • ChatGPT & GPT Al models • Constitutional AI • Creative AI • Criminal LLM AI • Electrogenetic interfaces • Exascale compute • Hardware latest emerging technology trends and envision the future of their bricking malware Infinitely firing laser weapons • Injectable neuroprosthetics • In vivo robotic surgery • Large Behavioural AI models • Laser force fields • Living CAR-T drugs • Matter creation from light • Memory wiping with light • Mind reading earbuds • Near creator grade synthetic content • Near human-level multi-modal Gen Al • Organisms with 50% Synthetic DNA • Petabit photonic chips • Predictive vaccine development • Quantum energy teleportation • Robot CEO appointed • Semi-autonomous AI agents • Self-organising AI synthetic brains • Selfreplicating DNA nanobots • Sound activated gene therapy • Spray on sensors & UI • Torpedo launching drones • Uncrewed fighter jets • Wolly mammoth meatballs • Zero Knowledge Proof cryptography ... and MANY more.

### **INTRODUCING THE 2024 STARBURST**

In this year's Starburst, which extends to 2075 and displays 167 of the world's most promising emerging technologies, each with an addressable market value of at least \$500 Billion spread across 13 categories, I promoted 35 new emerging technologies and demoted 35 - almost matching 2017 and 2018's record breaking figures.

In 2024, with COVID-19 now seemingly but a distant memory globally, but with two wars raging, increasing global geopolitical tension, and inflation and the cost of living still high, I expect to see military and overall technology led R&D spending to increase, especially in the areas of Compute and Intelligence, and expect to see spending on Biotech and Energy R&D remain strong. Furthermore, as AI becomes increasingly capable I expect to see more AI led breakthroughs.



## **MORE RESOURCES** ....

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