

TOP 10 EMERGING TECHNOLOGIES 2021

HEALTH SCIENCES

1. BIOINFORMATICS & GENETICS

- Bioinformatics
- Whole genome sequencing
- Allotopic expression
- Computational gene

2. MEDTECH & MEDICAL ROBOTICS

- Medical robot
- Neurorobotics
- Medical devices
- Virtual patients

3. NEUROSCIENCE & HUMAN ENHANCEMENT

- Neuralink
- Neuroscience
- Simulated reality
- Human enhancement
- Neurotechnology

COMPUTER SCIENCE & COMMUNICATIONS

4. ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

- Artificial intelligence
- Educational technology
- Simulation
- Speech recognition
- Semantic Web
- Bayesian optimization
- Natural language understanding

5. ADVANCED COMMUNICATIONS & SMART DEVICES

- 5G
- Smartphones
- Unified communications
- Virtual assistant
- Narrowband IoT

6. CLOUD, EMBEDDED & BLOCKCHAIN SYSTEMS

- Bitcoin
- Blockchain
- Cloud computing
- Radio-frequency identification
- Edge Computing
- Embedded software
- Online service provider

ENGINEERING & MATERIALS SCIENCE

7. QUANTUM COMPUTING & ELECTRONICS

- Quantum computing
- Silicon photonics

8. BIOTECHNOLOGY & NANOMATERIALS

- Biotechnology
- Nanotechnology
- Nanomaterials
- Semiconductors
- Printed Electronics
- Biopharmaceutical
- Synthetic biology
- Bio-MEMS

9. ROBOTICS & AUTOMATION

- Augmented reality
- Virtual reality
- Robotics
- Electric vehicles/aircraft
- Internet of things
- Digital twin
- Li-Fi & Virtual world
- 3D printing
- Automation
- Digital twin

10. ENERGY GENERATION & STORAGE

- Fuel cell
- Sensor
- Hydrogen fuel
- Energy storage
- Advanced manufacturing