Jalal Hassan

**Wireless Power Transfer:**

Wireless power transfer is the transmission of electrical energy without using conducting wireless as a medium. It uses electromagnetic inductions. Wireless power transfer has a great potential for many commercial applications including biomedical implants, charging of mobile devices, charges of drones, and charging electrical vehicles. this technology of wireless power transmission has eliminated the use of cables and batteries, thus increasing mobility, convenience, and safety of an electronics device for all users. Wireless power transfer is useful to power electrical devices where interconnecting wireless are inconvenient, hazardous or are not possible. Wireless power transmission systems are very sensitive to distance and misalignment between the transmit and receive coils, so they must be optimized at a particular distance.

**AR & VR:**

Augmented reality is an enhanced version or reality created using technology to add digital information to an image or something. Virtual reality defines as the use of technology to create simulating environment. AR & VR can not only be used in gaming and entertainment, but can be used in industries such as, utility hydro companies, accounting firms, celebrity engagements, and environmental organizations. Augmenting reality can be used for transitioning from PC base to standalone mobile VR devices, mapping of real world to enable persistence artificial reality mirror world, eye tracking, and facial expressions built-in for natural communication. VR could also help virtual humans to keep the real one’s company. Operational maturity has not been reached to use it in the enterprise scale. as a consequence, tremendous changes should be expected; therefore, companies do need to know to implement effectively.

**RPA:** Robotic process automation Is the process of automating anything and everything in the business with the help of robots to reduce human intervention. Robotics Process Automation can increase employee productivity and remove time and cost from business processes. RPA is not a physical robot but rather an automated software bot that functions like an additional worker and can be programmed to complete the repetitive tasks that consume your workday as it eliminate the simple human mistakes that can have catastrophic effects for the business, but there are some things that a robot just cannot do things that required human touch, and decision making.

**Quantum computing:**

Quantum computing Is the area of study on developing computer technology based on the principle of quantum theorem. It explains the nature and behavior of energy and matter on the quantum level. Quantum computing is becoming hot topic now, with the giant of industries like Microsoft, Google, intel, and IBM giving flashy presentation at big conferences about their quantum devices .Quantum computer operate on the atomic level and allows them to process data at speeds unimageable to classic computers that we use in nowadays. In the future, quantum computing will solve many areas of physics that are only theoretically proven, like nuclear physics, condensed matter physics, and so on. Quantum computing has the potential to revolutionize how we use data and power machines.

**Artificial Intelligence:**

Artificial intelligence is an area of computer science that emphasizes on the creation of intelligent machine That work and act like human. AI its now being used in almost every business sector to reduce human intervention, and It is also a major role play in cybersecurity and digital marketing. AI improves the accuracy of detecting breaches, increasing the efficiency of cyber security analysts, reduce the time they spend analyzing fake positive and improves productivity. In digital marketing, Artificial intelligence is being used to predict the behavior of a customer delivering a personalized experience to the use and unlocking new technologies for the marketers. It’s expected in the future AI and robotics will come together and AI will help create fully functional robot. AR virtual driven assistance will anticipate your needs and fulfill them without the need to give them any instructions.

<https://www.we-online.com/web/en/electronic_components/news_pbs/blog_pbcm/blog_detail-worldofelectronics_100414.php>

<https://enterprisersproject.com/article/2019/10/ar-vs-vr-whats-difference>

<https://www.cio.com/article/3236451/what-is-rpa-robotic-process-automation-explained.html>

<https://www.forbes.com/sites/chadorzel/2018/03/26/what-quantum-computing-is-really-good-for-right-now/#c60389e1d286>

<https://hackernoon.com/future-artificial-intelligence-2019-1cd09cc491c7>