Graphic Technologies

Graphic technology is a huge industry and one of the largest in the world. Over the past decade we have seen this industry grow exponentially in the areas of Software as well as hardware giving us the capability to create realistic visual imagery be it in the form of cinema, gaming, virtual reality augmented reality and the ongoing research into holography.

The biggest contributing factor in its current development is due to the unprecedented development in graphic processors and random-access memory. When we take these into consideration it is hard not to acknowledge two companies that have contributed largely to its momentum in growth and those companies are NVidia and AMD graphics. Due to their ferocious competitiveness with each other we have been able to enjoy some of the best technologies base on hardware, however hardware alone will not contribute to the visual graphic capabilities that we currently possess.

It is fair to say that the strides we have made in the are of Graphical software is mainly due to the popularity of games as well as the scientific research and development that demands innovation and new capabilities.

Gaming Software

Unreal Game engine by epic games

If you want to develop an epic game you might probably want to use this game engine, considered one of the best game engines in the word and created using C++ programming language It has all the necessary features built into it. A 3D game engine with Terrain, Physics and all other features that you need to create graphics that mimic reality. This game engine may not be suitable for small games as it also needs high end hardware like Nvidia GeForce RTX2080 Turing with ray tracing to get the optimal capabilities of the game engine. An excellent example what current high-end software and hardware can do.

Platforms: Windows, Linux, iOS, Android, PlayStation, Xbox and more

games created: Marvel Heroes, Batman: Arkham Origins, Infinity Blade 3, WWE Immortals and more.

Some of the other software for gaming include but not limited to Unity based on programming language C#, Godot written in C, C++ and C# with GDNative bindings such as Rust, D , Nim or using it’s own scripting language GD Scripts a high level , dynamically typed programming language like Python.

But we also need to have a look at other very essential software that is used in the graphic creation space like Autodesk Maya, Photoshop, 3DS Max to mention a few these software’s normally used for creation of commercial products in specific areas including Movies like Nemo and other popular graphic based characters that we see in movies like Transformers just to mention a few.

Medical Imaging.

Graphic technology is not limited to entertainment as I mentioned previously, the industry’s growth was influenced by our need to innovate graphical capabilities for more essential needs like in the area of Health. This imaging technology is mainly based on Computed Tomography, Magnetic

Resonance Imaging, Positron Emission Tomography and Phase-Contrast and Proton CT to name a few.

The latest software and hardware developments in this field is also spear headed by Nvidia. Recently they have developed a platform of hardware and software incorporating artificial intelligence known as Nvidia Clara Platform. This software kit will give the developers to apply a wide range of AI powered applications to existing medical imaging equipment that I mentioned above.

Nvidia is not the only company that is making innovation's in this area of medical Imaging. For example, Deep learning start-up Aidoc has created a software platform that can use AI to analyse Computed Tomography (CT Scan) for comprehensive full body Technology.

Also, the Deep learning company Subtle medical who is a member of Nvidia's Inception virtual accelerator program is aiming to create a MRI machine that acquires images in quarter of the time while requiring just 10% of the contrast dosage to patients.

In conclusion I must mention that I have not even touched on the subject of Hardware and other aspects that cover the area of Graphic Technologies that span the whole IT industry and incorporates every aspect of it, a comprehensive look at the industry may fall under writing a book about it and may not be within the scope of a article.