Assignment - PA0

Q1. A complete Ubuntu 22.04 install

I have completed the installation of Ubantu 22.04 in my laptop and is ready to be used for the purpose of running and operating ROS2.

Q2. You are (obviously!) up on Git

Yes, I have watched through the playlist shared by you and am progressing and getting used to Git. Since I have almost no eperience of Git and haven’t been coding for quite some time now, I am trying to catch up to the level of programming knowledge required for this current course. Will definitely be proficient in Git and using Ubantu by putting in all the hardwork necessary.

Q3. (Optional!) Something nerdy that you think I might find amusing - nothing that I cannot easily share with a thirteen year old

A Large Hadron Collider is the worled’s largest and most powerful particle collider ever built. It is about 27km in cercumference and is buried 100feet deep into the ground ! Like how facinaing it is. Also it can accelerate the particle to energy of 6.5 TeV which is HUGE for a particle. Also they make 2 particles travelling at opposite directions collide which make the collsion energy 13TeV, and that’s insane. They use electromagents to accelerate the particles and there is like such huge space and so the probabiity of the collision is really less. But that is determined by Luminosity, ie the number of particles passing a cross section in unit time multiplied by the area of cross section, which gives the number of collisions. This helped us with the discovery of Higgs particles that give mass to other particles.

Thus considering the size of the particles and with the size of protons being even smaller we relaize that even 1 collision would happen in long periods of time depending upon the Luminosity and Cross Section.

When I heard about this experiment and set up, it blew my mind just thinking how sucha a huge machine could be build and how are they collidingsuch teeny-tiny particles and studying their collsions. So I think this is really interesting and definitely not something a 13 year old will be abe to understand in much depth.