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CS 1300

Week 3 Homework

1. There are two primary types of memory used in computers. These are called ROM and RAM. Both are very important for allowing the computer to function. Both of these have been advancing year by year since they were invented. ROM is what we commonly call the hard drive of our computer. It used to be composed of disks that would spin with a head, almost like something you would see on a record player, that reads and writes to the disks. Recently we have began to move from these type of hard drives to what are called Solid State Drives or, SSD’s. These SSD’s are essentially big flash drives that allow for much faster speeds than the older type of hard drive. These however, are more expensive than the older types. RAM is what is sometimes referred to as the memory in your computer. This is directly related to the speed of your computer once it is booted up. Recent advances in RAM have been the DDR series. The most common RAM right now would be either DDR2 or DDR3 RAM. However the latest x99 motherboard series has been released that supports DDR4 RAM which is really expensive right now.
2. In the next decade I think that either processors or hard drives will make the biggest impact. Processors have come so far in the last 10 years. It really crazy to think where they might be in the next 10 years. How crazy would it be to have a computer that is as capable as the Titan supercomputer in your house. The rate that companies like Intel and AMD are moving at is amazing. I think that not only will processing power go up, but size and cost will go down at the same time over the next decade. Hard drives on the other hand have huge potential for advancement. Also in the last decade, hard drives went from being 64GB to 1TB+. Not only this but the cost has gone down a ton. I 1TB USB 3.0 hard drive is like $50 on sale. That is so cheap for the amount of storage you are buying. I think in the next decade we will go from 1TB being the standard to 1PB.
3. The main desktop CPU vendors are AMD and Intel. I would like to argue that Intel is winning the race. I know AMD for their low cost, but low powered processors. I see Quad Core AMD and Quad Core Intel and I instantly know that the AMD isn't as powerful. AMD is trying to hit the budget PC which isnt a bad thing, I just think Intel gives you more for your money. An Intel i7 quad core processor not only has 4 physical cores, but Intel does what is called hyperthreading. This allows for the creation of 4 more virtual cores that give a boost of processing power.