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**CS1 and CS 2020**

Most people admittedly view CS1 as something to be endured, but I found it to be a quite interesting lecture series and can say with certainty that I would take it again, even if it were not required. I was unsure about my choice of majors (CS&E) coming into UCLA, and the first couple weeks were filled with apprehension about whether I should switch to a wildly different field. Thankfully, I can now state with relative confidence that the computer science department is where I want to be, and it is mostly because of this lecture series that I am able to do so.

Two individual presentations that really stuck with me were Alan Kay’s talk on programming languages, and Rich Korf’s on artificial intelligence. When Dr. Cong announced that Alan Kay would be giving us a lecture, the first thing I did was text my dad to gloat. An electrical engineer, my father taught me about computers from a young age, and the name Kay had come up on more than one occasion. It was truly a rush to hear a talk by someone with that sort of name recognition, and his presentation was interesting and engaging to boot. The program he demonstrated was a simple, effective, user-friendly programming language that even kids could use. I was starstruck and inspired at the same time, and it tied in well with our CS31 programming going on at the same time.

Rich Korf, meanwhile, was not a name I immediately recognized, but his talk was the most interesting and really piqued an interest in artificial intelligence in me. I was able to walk out at the end of the hour with a sustained interest in his topics of cognitive science and “digital brains” and really wanted to take some of his classes sooner rather than later. Unfortunately, I’ll have to wait to reach the upper division level.

Artificial intelligence is, I believe, the next big achievement on the horizon for computer science. I feel it is possible, it is achievable within our lifetime, and I want to be one of the ones who helps make it happen. The development of true AI would revolutionize our entire world in endless ways, and it would be a landmark in history that would be remembered for millennia to come. Perhaps it will not happen by 2020, but hopefully we will have continued development towards the eventual realization of “digital brains” by then. Right now, if I had to pick an area of focus, this would be it.

Innovation is not, of course, just limited to artificial intelligence. If the rise and massive success of Facebook and Skype tell us anything, it is that more than anything else people want to be able to use computers to communicate with one another. Just 30 years ago, computers had a tiny, niche user base of mostly academic or industry types; today, anyone who can’t use a computer is considered as good as illiterate. The reason for this massive explosion in users was mainly the rise of the Internet and the ability to send data between computers incredibly quickly. Without the Internet, computing would never have reached the level of ubiquity it now enjoys. The success of computers can be attributed less to what a machine can do by itself, and more to what they can do as a network. Thus, at the risk of sounding cliché, social networks will continue to flourish in 2020 and long into the future, simply because of human nature. Anything that gives people the ability to communicate freely and quickly across long distances will naturally be popular. I would put my money down on the rise of a new website to overtake Facebook in popularity, one that brings together all aspects of peoples’ lives – social, work, and play. I picture something with integrated video chat, a la Skype, jukebox features similar to iTunes, very sophisticated scheduling for business or corporate use, like Outlook, in addition to all of the social features of Facebook. People like simplicity, and a website that brought everything together in one place would be sure to catch on.

Finally, I predict the complete ubiquity of touchscreens in ten years – possibly less. I can’t see a single device being made without them – even if mice are still around (and they will be), touchscreen displays are simply more intuitive and easy to use. Furthermore, user-friendliness will be the biggest advance made in the next decade, as companies stop trying to outgun each other with faster processors and bigger screens and start trying to make their devices simpler to use and more instinctual to operate. Apple already operates on this philosophy; I predict every other major corporation to follow suit rapidly.

Computer science is an incredibly fast-paced and exciting field. I can’t wait to see what the next ten years have in store for us.