**Why this major? (250-300)**

“NOW SHOWING”

“Transformers: Age Of Extinction”

In 2014, I left the theater with a newfound interest: Robots. The aftermath caused my youtube feed to be bombarded with transformer clips and robotics related videos. This led to me stumbling across a video on Boston Dynamic’s autonomous humanoid robot, Atlas. Being only 9 years old, I couldn’t possibly fathom the complexity behind the robot. As it walked, jumped, and balanced with one foot, I didn’t even question it. Like others, I could only watch, be amazed, and go on with my day.

Last summer, I interned at Sinar Himalaya where I learnt about the computer systems they use and assisted in setting up their website. What surprised me the most during my time there was not only how prevalent software was in their operation but also the complexity and depth behind it. For a company specializing in selling baking machinery, I didn’t expect virtual servers and large softwares like Dynamic AX to be involved. There was more than what met the eye.

I realized this was the same for Atlas and also our brain and intelligence. I seem to take for granted basic functionalities such as regaining our footing when pushed or jumping and landing which will be extremely difficult for a humanoid robot to do. How did they do it?  How did they incorporate human characteristics into their robots? I wanted to know more.

Through studying computer science, I can explore my interest in Artificial intelligence and its many subfields (e.g. Machine learning, Natural language processor). I'm especially interested in the Bioinformatics and Intelligent robot research area at UT Austin as I can study topics like neural networks and cognitive science to understand how we can translate human behavior to insightful data for prosthetics and autonomous robots.