In 2014, I was successfully admitted into the School of Information and Software Engineering in the University of Electronic Science and Technology of China, a member of *'Project 985'* and *'Double First-Class Plan.'* I felt like an eagle soaring high in the blue sky. The most valuable change that college life has brought my way is a consolidated foundation in computer science. I enjoyed and attended all the required college courses, bravely conducted experiments with thousand-lines coding requirements, and actively prepared for English tests. My hard work paid off by my high academic accomplishment: I got 80+ scores in all of my courses and even 90+ in core courses, which made me ranked in the top 4 among 759 students. I won many scholarships every year, and finally became an outstanding graduate. Also, I registered for the Overlay and Software Defined Networks by Professor Bill Nace from CMU in summer last year, which gave me a feeling of the American study. All these I have done or accomplished, are serving for one purpose- to pursue a higher degree in Computer Science.

I appreciated each project and experiment I was involved in since they allowed me to apply the theories to real programs. For example, I deeply understood computer networks by building an online two-person chatting system; I broadened my horizon by completing face-recognition login and finishing picture-editing codes for our multimedia website. I also contributed to Express Shipment Tracking App and gained experience in android application development. These projects made me realize that computer science is vibrant, precise and honest, not like any other subject. Codes never lie, and I enjoyed learning something that was real and being able to control them as well. As I became more competent, I was more practice-oriented and wanted to learn something outside the classroom. As expected, I revealed my passion to study machine learning from 2016.

After joining a renowned laboratory, The Sun Data Group, I had opportunities to study some cutting-edge knowledge. I read the book *On Intelligence* which illustrated fundamental mechanisms of memory and prediction, which ignited my interest in Hierarchical Temporal Memory (HTM) algorithm, a theory of intelligence based on neuroscience research. To pursue my interest, I joined Prof. Wu's group and her project *'HTM Method for Time-series-based Anomaly Detection'* where I learned HTM algorithm, compared it with other algorithms like ARIMA, and finally applied it in the experiment detecting dangerous rocks on the railway. However, the process was full of obstacles and challenges. For instance, when I was optimizing the algorithm, I carefully compared data from thousands of lines and found that one version of the algorithm was insensitive to temperature. I realized the problem was caused by an improper design. To address these challenges, I found better RSDE codes in Scott Purdy's paper *'Encoding Data for HTM Systems.'* This project marked the milestone of my growth from being interested into passionate, not only because of the successful completion but also because the project indeed aided the railway administration in decreasing the risk of railway rocks and thus ensuring the people's safety. In 2017, I still made some progress in this field. In order to automate the stock trading process, my team used the A3C algorithm, including an Actor with perception and prediction functions which was constructed by LSTM, as well as a Critic which was constructed by neural networks. This robo-advisor successfully ran and helped users make more money every day. We are still making efforts to make updates until it becomes 100%

intelligent.

Before I went to college, finding my way into a big company was one of my primary goals since I wanted to step into the society one day having gained work experience. Thus, in this fall, I did a technical support internship in the IT division of Amazon China, dealing with all kinds of IT problems that may occur during the usual business operations, from hardware problems to applications of software to network problems, and so on. There were also some precious moments during this internship. For instance, I joined the project '*Password Kiosk Build based on Webcam Kiosk*' on Ubuntu and contributed to this remote video swipe card system. What's more, I was the top tickets resolver, and won the star employee of helpdesk team of Nov. 2017, which demonstrates Amazon leadership principle '*Delivery Results.*' These exceptional experiences gave me a deeper understanding of the practical application of software and enabled me to think from a user' perspective. Besides, they ignited my admiration for large companies and professional groups, which motivated me to reflect on self-improvement and to progress towards my career goals.

Computer science has shown an amazing development. As shown in annual reports, jobs related to artificial intelligence in 2017 are more than 4 times than in 2013, which indicates that more and more people have joined the process of making technological dreams come true. However, while AI has a bright prospect, we should be ready for any detected or unexpected problems that we may face. For example, although various deep learning algorithms save a lot of labor in feature extraction and prepossessing, they still have two distinct disadvantages: One is the large demand for data, and the other is the heavy consumption of resources. Thus, in order to train myself to become a qualified engineer in such fields, I will always be meticulous and rigorous. I appreciate what the technology has brought me, such as speech recognition, image processing, intelligent push etc., and I look forward to mastering the required skills and adding values to the development of science technology.

In the Lab or at Amazon, I worked with outstanding Ph.D. candidates and researchers. I learned much from them and realized that my four-year college study is not enough, whether on a technical or perception level. What's more, even though I have learned diligently during my undergraduate studies, I need to keep learning and updating what I know all the time. To be a professional in my field with an international vision, I plan Yale University to be my next stage where I can access higher education with rich resources and where diversity is fully welcomed. Most importantly, The Yale Computer Science MS is one of the country's top-ranked programs. I can have the unique opportunity to study with faculty in small classes, and on a one to one basis. I believe I can explore new areas of study and go beyond the boundaries of current knowledge to make new discoveries. Overall, Yale University is a family gathering students from all over the world and helping them fulfill their dreams and create a meaningful future.

I pursue knowledge, excellence, optimism, and humor. I am at a balance between engineering and art. One shapes my professionalism in the industry, while the other fulfills my optimistic attitude and motivation. Overall, I am a vivid girl pursuing a rewarding career in computer science.