

Writing Sample 2

The passage is the statement of purpose I put together for the application of an online master program in computer science.

XXX – a university

YYY – name of the program mentioned in the passage

ZZZ – a university that provides the YYY program

I still remember the fulfillment I had the first time I used R to complete an assignment successfully without much guidance. After that I started my path to programming by learning R on Coursera. Afterwards, I took courses of different programming languages like C++, as well as MATLAB and SAS which are more analytic oriented.

Having had a general idea of what programming is like, I was triggered by its power and started to explore the iceberg. Out of classroom, my interest in programming led me to seek resources online to broaden my understanding of programming. I began to learn Intro to Computer Science at Udacity, which began with mechanism of search engine. Later I ran an official blog when I worked at EIU for which new collecting and filtering was very time consuming. What I learnt about the search engine occurred to me that programming might be a solution. Since collecting information is the first step for developing a search engine. It took me quite a while to assemble a web crawler but it could only collect information from a static website, which was far away from a mature product. I ended up with ready-to-use tools. After that I began to take a new look at programming. The more I learnt, the more ignorant I find myself to be.

After I started my journey at the graduate school, I was exposed to a variety of projects that required programming skills. I thought I was no longer a beginner. But the assignments of a course focused on Python wakened me up. I was always scored 80/100 while they were supposed to be easy-peasy. I was taught that having jobs done was far not enough for a good programmer. It gradually dawned on me that efficiency is one of the key components of programming well, especially when it came to parallel computing.

Before I graduated from XXX, I got an opportunity to work at Huawei Technologies. I was assigned to the Intelligent Q&A team, helping develop a chat bot with Python. I was faced with huge amount of problems in the real world as well as challenges for the application of machine learning algorithms due to data quality and other special issues. Most of my colleagues focused on the development of the

whole system while I was using Python to analyze data and giving out insights. I didn't look down on myself but I was really attracted by the process of turning great ideas to great products. At the same time, I learnt that real world programming was totally different from coursework again.

Now I've got a chance to learn computer science thoroughly which will help me line up dots I have collected. My motivation for the YYY program revolves my passion for computer science from two different perspectives. Firstly, based on my experience, I have gained much from self-learning and school coursework. However, a holistic and structured program at ZZZ University is exactly what I need, helping me see the iceberg in its entirety. On the other hand, I am so glad you offer the machine learning specialization, which is a perfect combination of my interest and background. What's more, courses about big data will better prepare me for the data-explosive world. Considering my current career in the finance industry, machine learning is also widely applied in the risk analysis such as fraud detection. And now a main barrier keeping us from using advanced machine learning methods is the difficulty in interpretation. I believe joining this program would offer me opportunities to communicate with people with similar background and be inspired. Following graduation from this program I intend to specialize in machine learning and keep making positive impact. I may stay in the finance industry, trying to apply new methods to risk analysis while continuing my contribution to the production.. No matter which way I choose then, YYY will definitely be the key to the door.