When I first encountered a calculator, like anyone else, I typed in “1 + 1” followed by “=”. The output of the integer “2” at the speed of light left me in awe. That was when I started to have high regards of computer and wanted to uncover the magic of a computer. This means learning the science of computing has always been my aspiration. If it could solve simple mathematical problems, it must be able to solve complex real world problems.

After finishing A level, I picked up a book called Digital Logic Design from a local university to satisfy my curiosity of the inner workings of a computer. Using transistors and a set of logic gates – AND, OR and NOT, almost anything humans can imagine is made possible from playing music to sending men onto moon. To me, computers are man-made miracles of the highest order.

Ofcourse, computers are only as useful as the instructions given to them. To harness their power, knowing how to program is a must. So I set out to learn Visual Basic, Python, C++, Ruby and currently web programming. I have attended coding workshops and programmes organised by local universities. Having a mentor guide me directly when I encountered a problem when solving a programming puzzle stood me in good stead. I could better remember the mistakes I made when someone was there to correct me. Another equally important takeaway from those workshops is the connection I made with like-minded people. We would form a group chat to discuss about interesting programing challenges. The benefits of having a mentor and a community sharing similar interest greatly exceed those from self-teaching. The best place to have these both is the university.

Programming makes me happy. It allows me to create anything that comes to my mind and lets my creativity run wild. To aid my teachers in dealing with the easily distracted class of mine, I created a program which randomly assigns the seats of my classmates such that best friends are separated so that more attention is paid to the lessons. It proves to be a necessary evil as my class would go on to clinch the ‘Most Improved Class’ title at the end of the year. I had also created a program which kept records of the class fund. This makes the job of the treasurer easier in keeping track of those who owed money and how much they owed. If I can slightly improve the learning environment of my class and my school, I would not hesitate to do it even if it means little for those who benefited from it for a simple reason- it makes me happy.

In my spare time, I would learn how the stock market works. The way people respond to news as reflected in the changes in stock prices never fails to marvel me. Speed, fear, greed and indecision are represented in the chart patterns. To facilitate the technical analysis of a stock, I have created a program which takes in some inputs abstracted from the financial statement of the company and outputs essential information such as its cashflow for the next ten years and the intrinsic value of the stock.

The victory of AlphaGo over go master Lee Sedol last summer marks a significant event in the realm of computing. The computer program did so by recognising patterns instead of evaluating all possible moves on the board which is unrealistic. The news convinced me of the importance of computers in solving complex real world problems in this age of big data as computers can better overcome its limitation via optimisation.

I am looking forward to