By inputting the square root of 3.14, a calculator can magically return its value at the speed of light. This is achieved by having countless of transistors each control the flow of electricity. The ability of doing arithmetic almost instantly by flipping electricity on and off amazes me. Using the same principle, more advanced task is made possible with computers such as displaying coloured images and animation, playing music, sending men to moon, controlling traffic and virtually everything imaginable. To me, computers are man-made miracles of the highest order.

The victory of AlphaGo over go master Lee Sedol last summer marks a significant event in the computer world. The computer program did so by recognising patterns instead of evaluating all possible moves on the board which is unrealistic. I am convinced of the importance of computers in solving complex real world problems such as road traffic control and navigation. The ability of computers in overcoming its limitation via optimisation could facilitate road traffic control and navigation

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 be the ‘Most Improved Class’ at the end of the year. I have also created a program which keeps records of the class fund. This makes the job of the treasurer easier in keeping track of those who owe money and how much they owe. 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. I do it not so much because I am altruistic, but on the contrary 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.