In 200 words or less, tell us about the most interesting piece of software you’ve built. It can be a college project, a Github repo you’ve created, a mobile app - the choice is yours!

The most interesting software project that I was involved was during my final year project of my bachelor’s degree. Our team was tasked to design and implement an algorithm to obtain stereo images (The recovery of the 3D structure of a scene using two or more images of the scene) which is insensitive to anomalies such as variation in illumination and geometry. The project was challenging because it involved complex procedures like chromaticity normalization (transforming R,G,B colour values in a pixel), bilinear filtering to prevent fattening effect along the edges of the objects. But in the end, our newly developed algorithm called the adaptive cross co-relation method proved to perform better than the existing methods such as normalized cross co-relation and sum of absolute differences methods. The newly developed software was more accurate, insensitive to illumination variations and executed much faster than the previously existing methods. This was useful for applications involving cutting edge technologies like 3D printing, entertainment and military applications. The biggest takeaway from the project was that it helped me to learn how to go about solving complex problems by breaking it into smaller pieces of manageable problems.