Vihanga Amarasinghe

Phil Baptiste and his team are working on advancing software development in the U.S. Navy. Their aim is to create a planning software to help the Navy carry out tasks more easily and efficiently. For example, the software can notify ships of a hurricane nearby, or how much fuel a ship may need to get to a destination, or even if there are bandits along the way. That way, Navy and Marine Corps vehicles can plan out tasks and missions with useful information.

In addition to this planning tool, Baptiste is working on being able to transfer updated software to naval ships more swiftly. As of now, trying to do this would take months.

On any given day, there are up to 50,000 navy sailors and around one hundred navy ships at sea. These ships include aircraft carriers, cruisers, submarines, and more. On top of that, each of these vehicles carry out different missions and purposes. All these factors add to the complexity of the U.S. Navy.

However, Baptiste's software can help mitigate problems like these. The software Baptiste is working on can be important to the Navy and Marine corps because, like many software programs, it can make the U.S. Navy members' goals much easier and organized. For example, with Baptiste's updated software, two of those one hundred ships could be able to communicate within 24 hours.

This topic inspires me because I have a strong interest in software development. Right now I am learning new programming languages like C and Python but I am still exploring how different programs are being used in the real world. Like many people though, I thought that the bulk of software development was generally used in web services such as Google, YouTube, and video games but this video has shown me that there are so many opportunities in software engineering. This topic has opened up my mind to what seems like an enjoyable career opportunity in the future.

Phil Batiste's work inspires me not only because his job as a software developer aligns with my future ambitions but because he does what he loves while being able to aid the soldiers that work to protect our country. Before this video my goal for the future was to get a job for a tech company as a software engineer. However, I did not know that the U.S. Navy had software developers working by their side but now that I know of this, I am very intrigued by the idea of developing my computer science skills and helping improve technology in the Navy and Armed Forces.

I imagine that in 15-20 years from now, science and technology will allow a lot of the things in our lives to be autonomous. For example, the idea of self-driving cars was introduced years ago and is being tested on the roads today. In 2040, I imagine some everyday citizens operating their self-driving cars in order to get where they need to. Likewise, online retailers such as Amazon are working to incorporate unmanned delivery drones in order to help deliver packages to customers. New technologies these days are becoming increasingly self-governed and I imagine that our daily lives in the future will depend on automated artificial intelligence.

Similarly, I strongly believe that autonomous technology will be incorporated into the Navy and Marine Corps' future. Like Dr. Brizzolara explained in his video, autonomous vehicles will allow more people to stay out of dangerous situations, better optimize ships and other vehicles in a way where a focus on accommodations for humans on board will not be needed, and be able to put vehicles in more dangerous situations in order to carry out different missions without the risk of human life. Right now though, Dr. Brizzolara is not focused on large carrier ships but rather small boats. However, in the not so

distant future, I believe that almost any vehicle in the Navy and Marine Corps will be autonomous whether it is a carrier or an aircraft.