(Approx. 1376 words)

President's Corner

Happy New Tech Year

By Greg Skalka, President, Under the Computer Hood UG, CA

January 2019 issue, Drive Light

www.uchug.org

president (at) uchug.org

Another New Year is upon us. As we start 2019, I wonder what new technology we will see this year, and how it will affect our lives. It seems we can’t swing a corded mouse (better for our times than a dead cat) without hitting some piece of technology in our lives. So many things we take for granted today were not around 20 years ago, or even 10. Smart phones, smart homes, smart cars, smart TVs - everything is becoming smart through technology. How did we ever survive with only dumb stuff around us?

We have just concluded another busy holiday shopping season. Remember when that meant spending the month of December in the shopping malls, standing in long lines? Now with online shopping (especially Amazon.com) and all the tech that enables it, we can do all our shopping from home. With our smart phones, we can even shop while on the go. This trend has resulted in big changes in our behaviors, as well as in our local and global economics. Brick and mortar chains that were once the powerhouses of commerce, like Sears, are shrinking or going out of business. Almost all businesses fear Amazon, as it has transformed the shopping experience in many categories. How will Amazon next change our lives?

The concept of two-day delivery of products used to be exceptional and/or expensive, but now it is commonplace (and the default for all those Amazon Prime subscribers). Will 2019 finally be the year that Amazon makes good on their plans to deliver products the same day using drones? Amazon CEO Jeff Bezos claimed in December 2013 on “60 Minutes” that drones would be delivering packages within five years. Where are our drone deliveries?

There are plenty of drones, or unmanned aerial vehicles (UAVs) out there now, of all kinds. They protect our borders, launch strikes against our enemies, photograph and film our events and monitor our real estate, crops, forests and construction. They can also provide entertainment, through personal use and drone racing. Unfortunately, misuse of the technology has also occurred, requiring new regulations for their use. From interfering with fire-fighting efforts in California wildfires to the recent shutdown of the Gatwick Airport in England due to drone overflights, we have seen how these useful devices could be misused by vandals, criminals and terrorists. Some aviation experts believe it is just a matter of time before a drone causes a commercial plane crash.

Another technology that didn’t exist ten years ago is personal DNA analysis. Companies like AncestryDNA, 23andMe and MyHeritage claim to provide ancestry information and ethnicity breakdowns. Some claim to provide genetic health information and predisposition to inherited conditions. Some can match you to others that may be relatives. These are home kits that allow you to provide a sample that is analyzed and potentially matched to the samples of others. Many of these kits were discounted for the holidays and advertised as great gifts.

These tests may be entertaining and can provide useful, though perhaps vague, information on your ancestry and genetic health. There are some concerns about privacy and accuracy, however, and you may learn things you might have wished you didn’t know. One company’s test reportedly failed to identify that a submitted sample was actually from a Labrador retriever. Some have learned from these tests that their parentage is not as they were led to believe, or that they had half siblings unknown to their families. Submitting your sample puts your DNA information in the test company’s genetic database, which could be used for things you didn’t intend. One example is in identification of suspects in law enforcement investigations. These genetic testing companies could also share or sell genetic information to insurance or pharmaceutical companies.

Loss of privacy seems to be a common risk with a lot of the new technology we have adopted in the last decade or two. In the best case, our personal information, preferences and habits (such as for travel and consuming) have become a commodity that companies we deal with can use, buy and sell, with advertisers looking to improve their sales to us, the consumers. In the worst case, criminals are trying to gain, through tricks or theft, our personal information, especially that dealing with our identity and account passwords, in order to steal from us, or sell to others that will. Somewhere in the middle is the threat posed to the individual by a police state that has accumulated detailed information on its citizens, with the goal of tracking and controlling them.

In addition to the information that we provide online with our computers, or in using our smart phones, we now have to worry about the data collected by our connected cars. Automakers are collecting ever more information about how our cars are running and how we use them, and that information is often accessed wirelessly. While older cars are still safe from this, about 3 in 4 of the cars sold by 2020 will be online. This information may be able to help track your car servicing more easily, update safety systems and provide emergency services, but it also could be sold to insurance companies eager to study your driving habits or provided to law enforcement to determine where you have been or when you have been speeding.

Self-driving cars have seemed to be on the verge of introduction to the consumer for a few years now; perhaps 2019 will finally see a service generally available. Many companies have been testing autonomous vehicles for years, mostly with human back-up drivers. Autonomous trucks, taxis and cars could be revolutionary forces in our society, economy and labor market. These technologies could reduce transportation costs greatly and help provide greater freedom for the disabled, and likely would reduce vehicle accident rates.

Technology appears to be finally allowing humans to once again make real progress towards space travel. Christmas Eve 2018 marked the 50th anniversary of the first flight to the moon, where Apollo 8 orbited the moon and took the first photo of Earth as a distant object. Following the final Apollo moon landing, however, human space flight never left low Earth orbit. Now that many commercial companies are competing with NASA to fly cargo and ultimately people to the International Space Station and beyond, progress in space is accelerating. Several companies, including Elon Musk’s SpaceX and Jeff Bezos’ Blue Origin, have successfully demonstrated the recovery (landing) of a rocket first stage, allowing reuse and a lower cost for future launches. Musk has a plan for SpaceX to be able to launch people to Mars within six years. I feel for those that watched the moon landings as fifty-year-olds and then died disappointed that humans never again did anything so dramatic. With luck my 82-year-old parents will see people on Mars.

National Geographic has created a TV series called ‘Mars’, which is very inspiring, yet brings some concerns with the human colonization of that planet. It portrays some of the issues we could face in the development of space technology by private companies, rather that government entities, a road we appear to be going down now. It shows the parallels this could have with the commercial development of resources here on Earth in the arctic. It is a series well worth watching.

As hopeful as I am that all the new tech we get in the New Year will on balance be a benefit to humankind, I sometimes wonder more about the humans. Many notable people, including Stephen Hawking, Elon Musk and Bill Gates have concerns about artificial intelligence, or AI. AI is on its way, so I wonder if one day we will have to battle with it for our survival, as in ‘The Terminator’ movies, or will we humans gladly relinquish our control over technology, should that time come. A study by McCann Worldgroup of young people in seven countries conducted in 2011 indicated that 53% of 16 to 22-year olds would prefer to give up their sense of smell than their technology. Will our future turn out rosy, or just stink?