TECHNOLOGY

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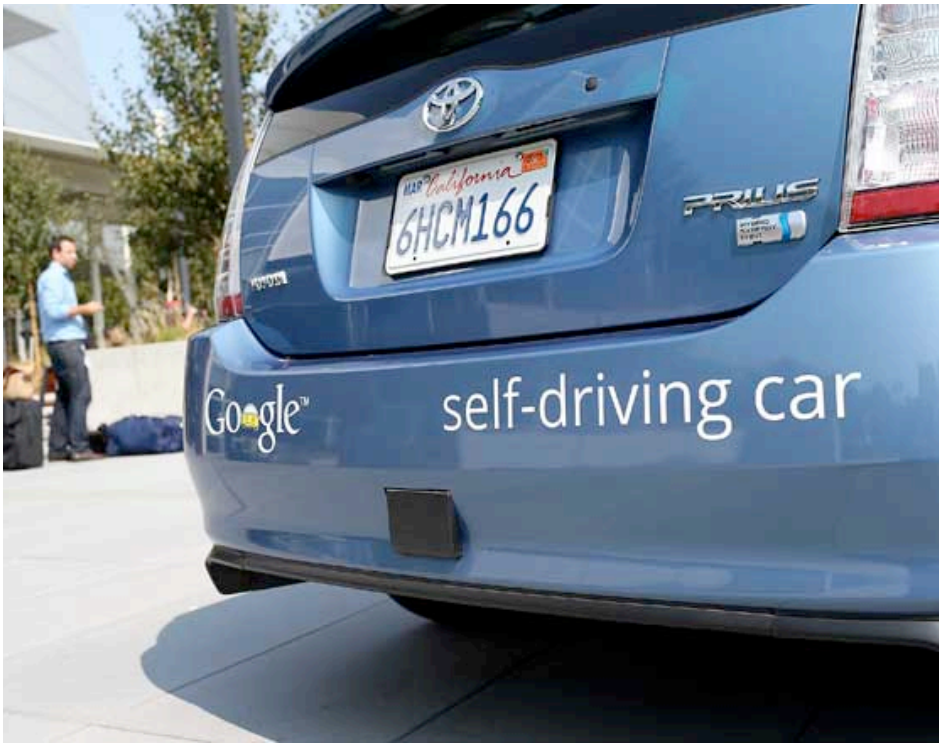

Technology is helping people with their lives! And saving them!

Google announced that that they would be making special glasses that have a small screen with the augmented reality feature, which is pictures meshed together with the stuff you're looking at. For example, looking at google maps while hiking in the forest. Another useful application could be a projection of the current route information like GPS maps into the glasses while driving, which is definitely going to save some lives. One of the less serious applications can be a some kind of price checker. Imagine, you are looking at the store front and seeing a cool bike. Wouldn't you want to only not only the price of the bike but also its technical characteristics such as how fast it goes, or the number gears it has, or its weight.

Another interesting project google is working on is the self driving car, a car that is aware of its surroundings and can drive to preprogrammed locations. The car can drive without a driver, can park itself, and wirelessly communicate with both people, other cars, and public services such as road closure and traffic alerts. For example, all cars approaching an intersection can quickly join ad-hoc network to coordinate the order of crossing and avoid crashing. This is an example of an algorithm that can save people's lives.

Even further, if car can drive itself why does it even need passenger at all? For example, the car drivers a person home, drops off in front of the door and then parks itself in the garage. This use case is even more interesting when car drivers a person or a family to a restaurant or a movie theater. The car can drop its passengers in at the establishment and then try to park itself on the street close by or drive to a remote large parking location and then come back to the owner when it is needed. My parents were always complaining about how much time they waste in traffic just sitting in the car and concentrating on their hectic surrounding. If the car could drive itself then my parents could work in the car without worrying about traffic. I can clearly see my dad sitting in a car and feverishly typing an email on his trusty laptop. A self driving car could help the elderly and disabled a lot. For example, with this technology blind people could easily travel great distances.

The helpful Pr2 is a robot that performs tedious tasks like folding laundry, retrieving items, and much more. These are things that people would not do if they could avoid doing it. This robot would free people from some of their chores. I can definitely see my mom happily looking at her Pr2 while it is doing the laundry. Nevertheless the Pr2 certainly can help people who can't do their chores by themselves, like the elderly and disabled.

However not all robots are created by for the benign purposes. Some are made for the military to help troops carry out their tasks. The Ls3 is an example of robot created for the ground troops. It is a dog shaped robot funded by DARPA and designed to walk on rough terrain and carry up to 400 pounds of equipment or supplies. The Ls3's smaller brother the BigDog can carry up to 340 pounds and run at 4 mph. The runt of the family is LittleDog, a small robot designed to

research locomotives. These machines would fill the need that is a void since the disappearance of pack mules from the battlefield. Imagine, the Ls3 attached to the side of the personnel carrying vehicle, which is driving on the road at high speed. A pack mule tied to the top of the vehicle would be scared to death and look really silly. Once the machine is stopped solders can turn on the Ls3, load it with equipment and continue with the mission without all the weight they have to carry now. This would definitely make troops more mobile and enthusiastic.

Further development of this idea could be a robot, which is a part of the military unit that can do some important tasks that would be dangerous for humans to do. For example, extract the fallen fellow solder from under the line of fire. It can protect the wounded with its heavily shielded body while waiting for the automated medical helicopter.

The SandFlea is a RC car with a little twist, it can jump 30 feet in the air! It can get into the third floor window and conduct an intelligence mission. This robot is funded by REF. It weighs 11 pounds and can jump 1-9 meters in the air. It can precision jump up to 8 meters in the air.

But not all robots have to walk on four legs. The ASH is a navy fire-fighting robot that is supposed to help fight fires alongside humans. ASH is not finished but it is expected to be done the winter of 2014. ASH will put out fires with a special chemical that it shoots from its forearm.

The PETMAN is a humanoid robot that can climb, carry, throw, and much more. PETMAN is supposed to control its temperature, humidity, and sweat like a human. It was designed to test suits that are supposed to protect humans from dangerous chemical agents. The robot can detect a tiniest presence of the chemical inside the suit to the report a malfunction. It can also test the mobility of the suit and provide various engineering data for the designer of the protective armor.

In conclusion, the development of robotics fueled by the advances in the software development, and as my dad likes to say "the probabilistic reasoning" pictures great possibilities. I can imagine the future world full of helpful robots. I hope to learn enough math and engineering when I grow up to make my own robot.