Introduction

Automatic number-plate recognition is a technology that uses [optical character recognition](https://en.wikipedia.org/wiki/Optical_character_recognition) on images to read [vehicle registration plates](https://en.wikipedia.org/wiki/Vehicle_registration_plate) to create [vehicle location data](https://en.wikipedia.org/wiki/Vehicle_location_data). It can use existing [closed-circuit television](https://en.wikipedia.org/wiki/Closed-circuit_television), [road-rule enforcement cameras](https://en.wikipedia.org/wiki/Road-rule_enforcement_camera), or cameras specifically designed for the task. ANPR is used by police forces around the world for law enforcement purposes, including to check if a [vehicle is registered](https://en.wikipedia.org/wiki/Vehicle_registration) or [licensed](https://en.wikipedia.org/wiki/Vehicle_licence). It is also used for [electronic toll collection](https://en.wikipedia.org/wiki/Electronic_toll_collection) on [pay-per-use roads](https://en.wikipedia.org/wiki/Road_pricing) and as a method of cataloguing the movements of traffic, for example by highways agencies.

Automatic number-plate recognition can be used to store the images captured by the cameras as well as the text from the license plate, with some configurable to store a photograph of the driver. Systems commonly use [infrared](https://en.wikipedia.org/wiki/Infrared) lighting to allow the camera to take the picture at any time of day or night. ANPR technology must take into account plate variations from place to place. Privacy issues have caused concerns about ANPR, such as government tracking citizens' movements, misidentification, high error rates, and increased government spending. Critics have described it as a form of [mass surveillance](https://en.wikipedia.org/wiki/Mass_surveillance).

Voice recognition is a computer software program or hardware device with the ability to decode the human voice. Voice recognition is commonly used to operate a device, perform commands, or write without having to use a keyboard, mouse, or press any buttons. Today, this is done on a computer with ASR (automatic speech recognition) software programs. Many ASR programs require the user to "train" the ASR program to recognize their voice so that it can more accurately convert the speech to text.

We have come up with a sophisticated system that integrates both of these features to level up the security protection that can be implemented using machine learning.

Data is the lifeblood of all business. Data-driven decisions increasingly make the difference between keeping up with competition or falling further behind. Machine learning can be the key to unlocking the value of data and enacting decisions. Machines learn and provide intelligent insights through a sophisticated use of [learning algorithms](https://mapr.com/blog/mapr-and-machine-learning-polytheism/#training-algorithms). To provide business value, the machine is trained to learn patterns from data and then can proceed autonomously on new and changing data. This creates a dynamic feedback loop, which allows it to efficiently generate more models to gain further insights, even more accurately, without requiring additional resources or human interaction. With continuous advancement in this field, machines are becoming increasingly self-healing, self-organizing, and self-architecting, seamlessly producing greater value.

Resurging interest in machine learning is due to the same factors that have made [data mining](https://www.sas.com/en_us/insights/analytics/data-mining.html) and Bayesian analysis more popular than ever. Things like growing volumes and varieties of available data, computational processing that is cheaper and more powerful, and affordable data storage. Data preparation capabilities , basic and advanced algorithms, automation and iterative processes, scalability, ensemble modeling these are required for good machine learning system.

Conclusion:

Thus, from our system it is apparent that the hybrid number plate and voice recognition software provides substantial benefit to the user in the form of added security and protection. Thus, there will be less case of theft and robbery. At the same time, if we manage to install close circuit cameras at every corner of the road, we will be able to keep track of our car at any moment. For this system to get full advantage we need global monitoring system as well as sophisticated technology at the same time. In-future this type of double security system possess great potential in our society.