

**\*Please make a copy of this document and include this in your GitHub repository for your submission, using the tag #AndroidDevChallenge\***

**Tell us what your idea is.**

I would like to develop an app which could recognize the license plate in the Street in movement and to notify if the car is required for the police. This app should be install in a kind of camera looking forward on the back of the rearview mirror. The

app should reads the license plate when the car is in movement and compares it with a list of license plates stored locally. If find a record, It should send a warning to the policy with the location of the car. People could receive a kind of reward for every warning send. The database could be updated every period of time to store the information locally. Machine learning could read the license plate of the cars. This app could be used in a lot of things in a smart streets in the future. The camera could have his normal properties as record everything where the car goes by security.

*Describe in 250 words what the feature or service will do and how you’ll use Machine Learning to push the bar:*

**Tell us how you plan on bringing it to life.**

*Describe where your project is, how you could use Google’s help in the endeavor, and how you plan on using On-Device ML technology to bring the concept to life. The best submissions have a great idea combined with a concrete path of where you plan on going, which should include:*

* *(1) any potential sample code you’ve already written,*
* *(2) a list of the ways you could use Google’s help,*
* *(3) as well as the timeline on how you plan on bringing it to life by May 1, 2020.*

Well, if you see the project is pretty simple. More difficult thing I see is to read the license plate is movement. If ML technology could read that, should be great.

Some steps I see so far are:

1. Read the license plates.
2. Develop a nice search algorithm.
3. Search in the local database.
4. Notify if find something record (send location)
5. Update the list (delete and bring new license plates from server)

Assumptions:

1. The device (camera) always are connected the source of energy like the camera I have in my car.
2. The police or somebody who hosts the main information source approves the project.
3. Every warning should receive a kind of small money reward, points, etc.

*how you could use Google’s help in the endeavor, and how you plan on using On-Device ML technology to bring the concept to life.*

* *If the application could read the license plates using* ML technology, the rest of the application were pretty simple.

*(1) any potential sample code you’ve already written,*

* *I have code what receives data from cloud, sends data to cloud, search records in a local database; that is pretty simple and fast code. The key of the app is to get the license plate from the video.*

*(2) a list of the ways you could use Google’s help,*

* *Google could show me:*
  + *How to install software in that device (camera)*
  + *How to use ML to get the license plate (in text format) from the video.*
  + *Once I develop the app, I would need sponsorship to install the app in a lot of cameras. That is not the kind of app you can put in the store. That should be install then in the cameras.*

*(3) as well as the timeline on how you plan on bringing it to life by May 1, 2020.*

*We (I and Google) could talk with the people who sells cameras and the police to install the camera. That could event become a law, every person with this could be a kind of secret police.*

**Tell us about you.**

A great idea is just one part of the equation; we also want to learn a bit more about you. Share with us some of your other projects so we can get an idea of how we can assist you with your project.

Well. I am from Costa Rica, I just have about a year learning Android Studio. I like it too much. I am studying an online Master Degree in Application Mobile Applications. I am married, I have three children. I am 44 years old.

**Next steps.**

* Be sure to include this cover letter in your GitHub repository
* Your GitHub repository should be tagged #AndroidDevChallenge
* Don’t forget to include other items in your GitHub repository to help us evaluate your submission; you can include prior projects you've worked on, sample code you've already built for this project, or anything else you think could be helpful in evaluating your concept and your ability to build it
* [**The final step is to fill out this form to officially submit your proposal.**](https://docs.google.com/forms/d/e/1FAIpQLSe43koQL33IzgxXQl29Ex3AhFuqd4hQzxLiXREqwRkDGtx1vA/viewform?usp=sf_link)