Google Vision AI Code a LPR

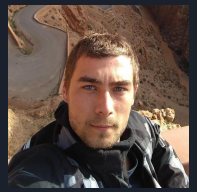
@TgnDevs

Oriol Mauri

https://www.youtube.com/watch?v=y-oVRpLtgbk

Oriol Mauri Guiu

Software Engineer



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Robitec
GRUPO MAURI

Avinguda Països Catalans

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- Motivation
- AI Introduction
- Google Vision AI
  - Functions
  - Test API REST
- Code the LPR
- Pros & Cons

Motivation

Scenario: I/O Access Control

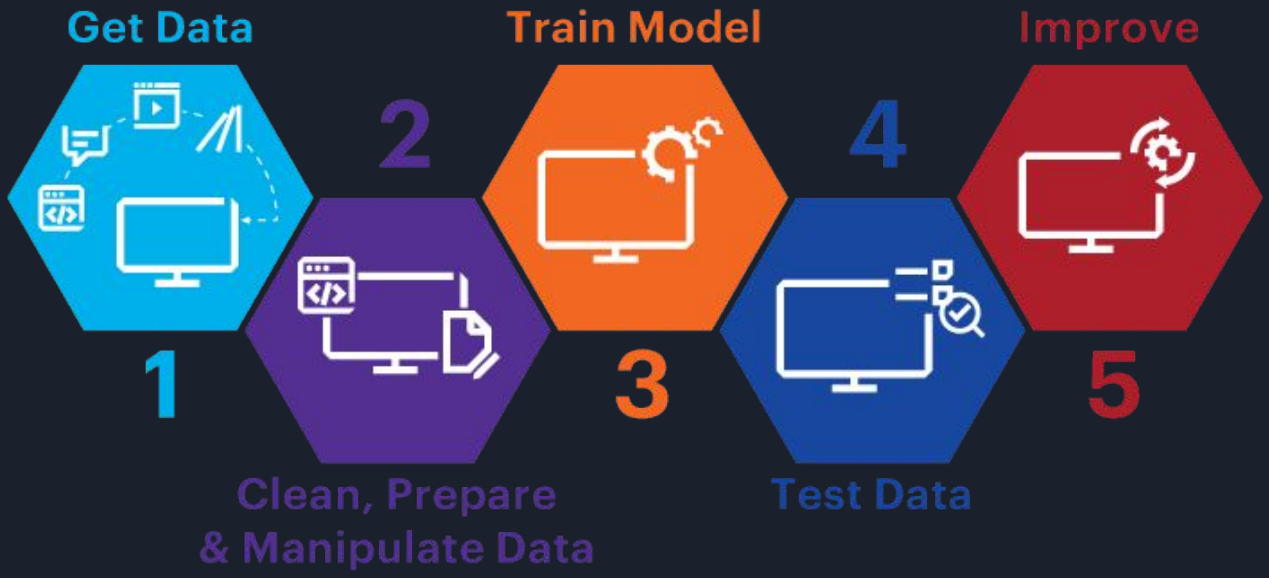
- ID: License Plate

Possible Solutions:

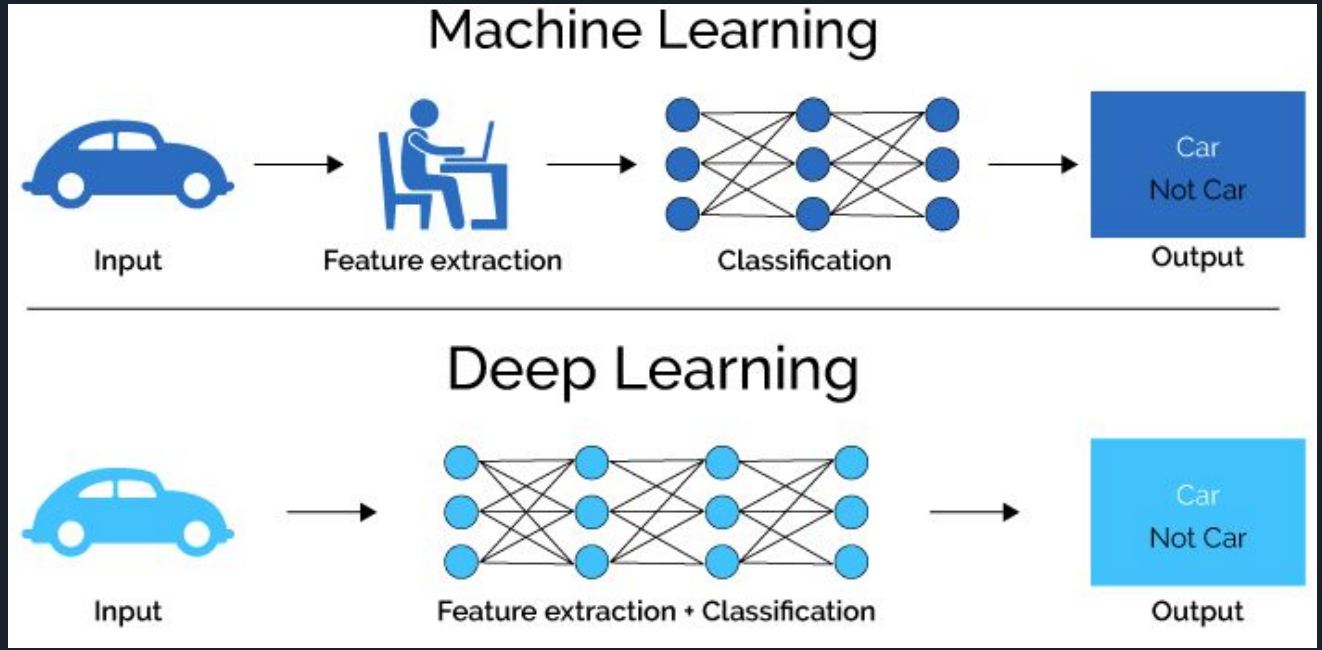
- Neural Labs ©
- Google Vision AI

Tools

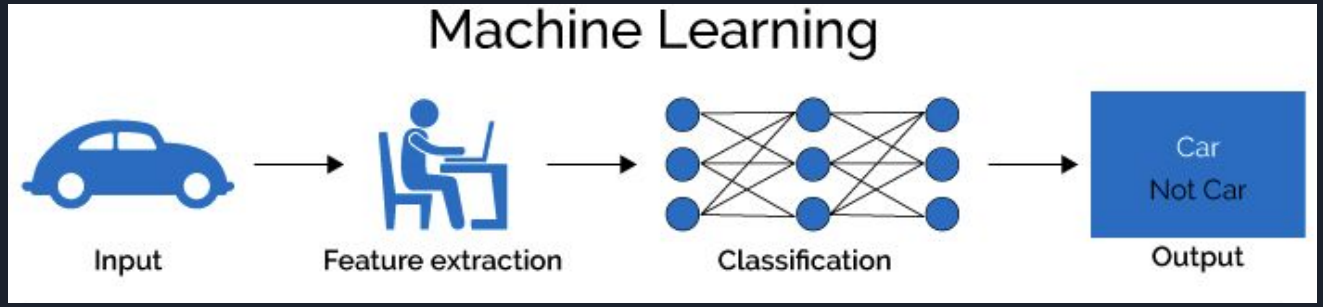
AI Stages (Introduction)



How the AI learns?



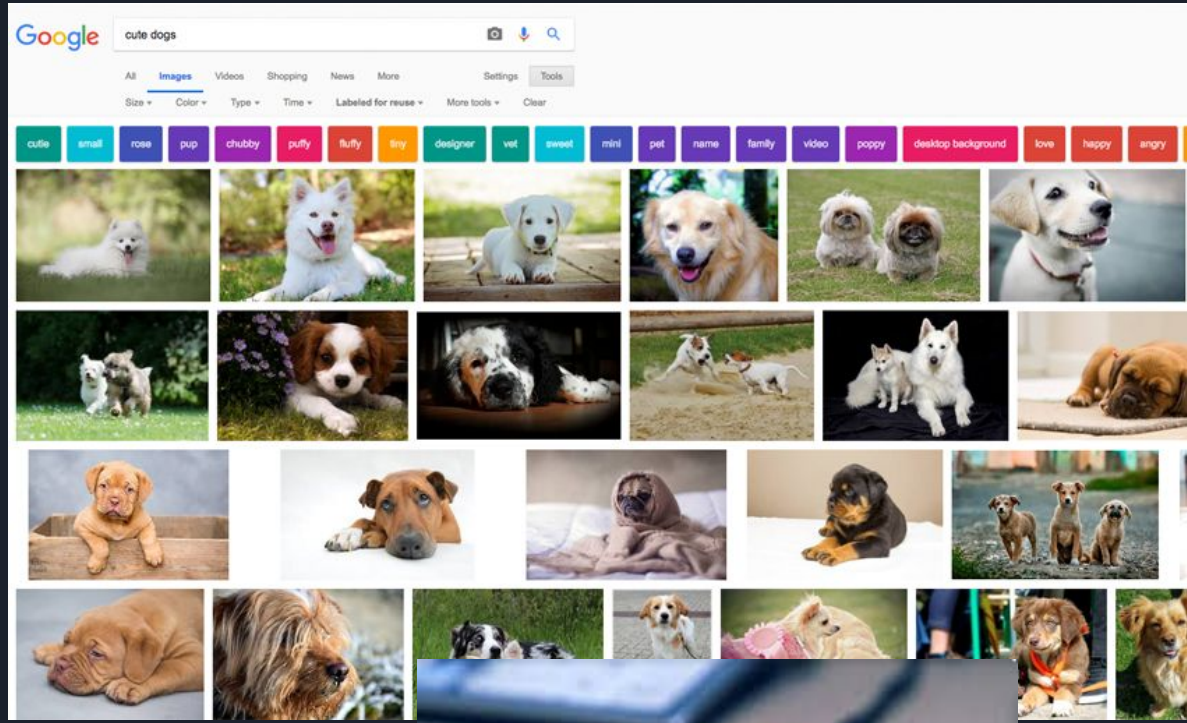
How the AI learns?



- Supervised
- Expected Output
- Test & Failure
- Object Detection Application

Example

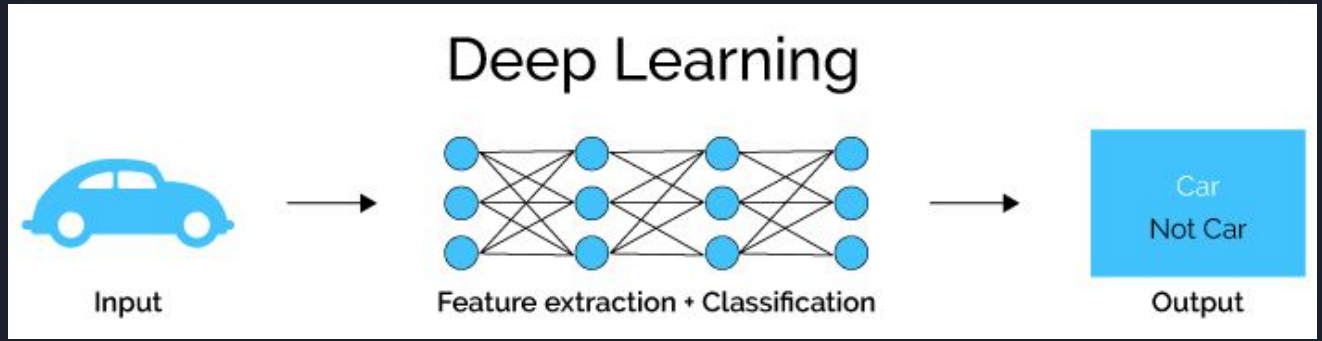
Selecteer alle vakken met
verkeerslichten
Als die er niet zijn, klikt je op Overslaan.
OVERSLAAN


Google
cute dogs
All
Images
Videos
Shopping
News
More
Settings
Tools
Size
Color
Type
Time
Labeled for reuse
More tools
Clear
cutie
small
rose
pup
chubby
puffy
fluffy
tiny
designer
vet
sweet
mini
pet
name
family
video
poppy
desktop background
love
happy
angry

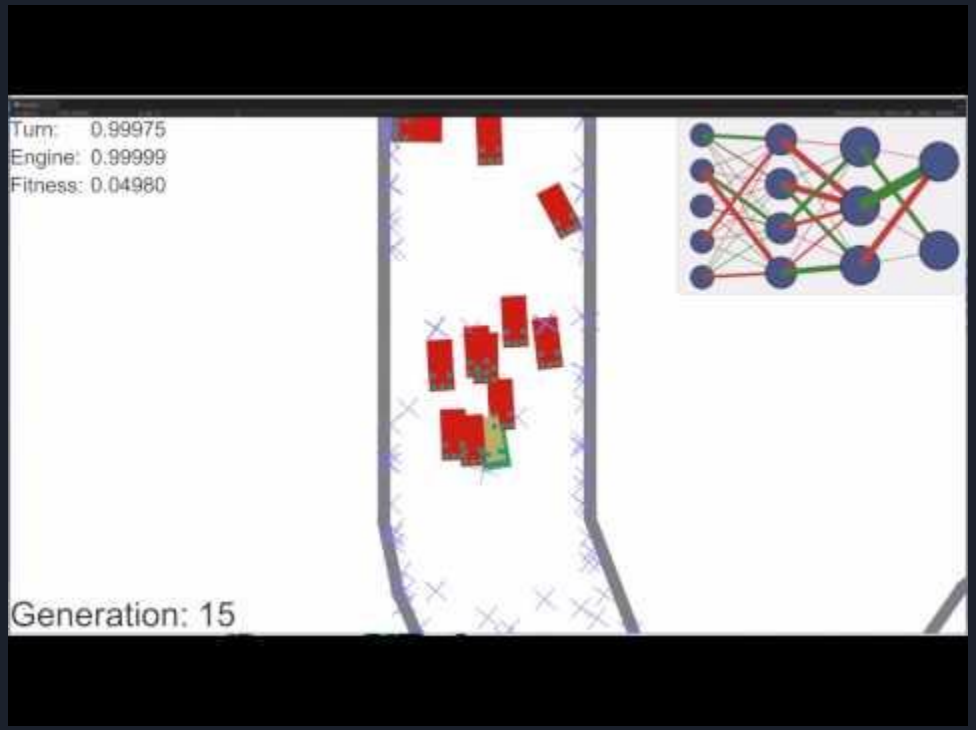
amazon

How the AI learns?

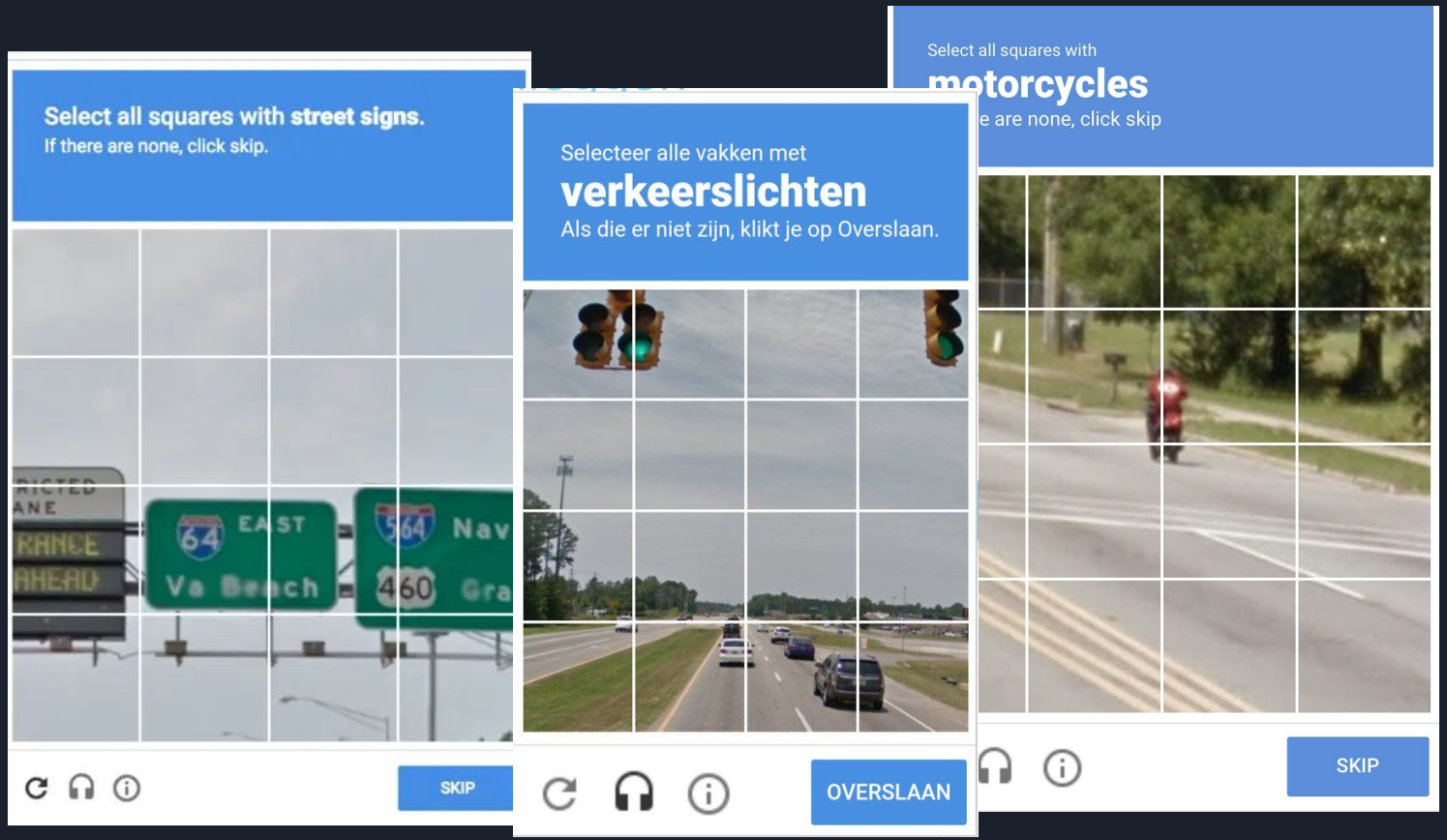
- Not Supervised
- Not Output Expected
- Future
- Based on Human Learning
- Predict and Create Patterns



Video Example



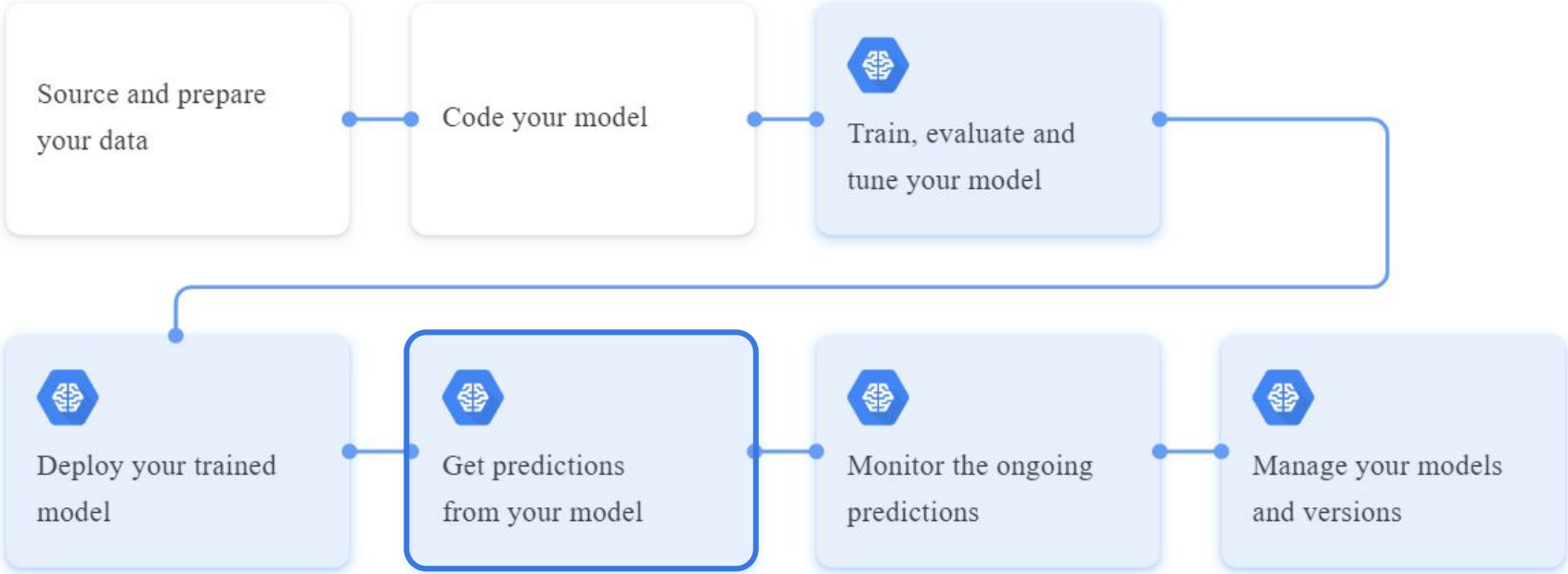
Did you know?


Select all squares with street signs.
If there are none, click skip.
SKIP
Selecteer alle vakken met
verkeerslichten
Als die er niet zijn, klikt je op Overslaan.
OVERSLAAN
Select all squares with
motorcycles
e are none, click skip
SKIP

Tools

AutoML Vision Workflow with Google

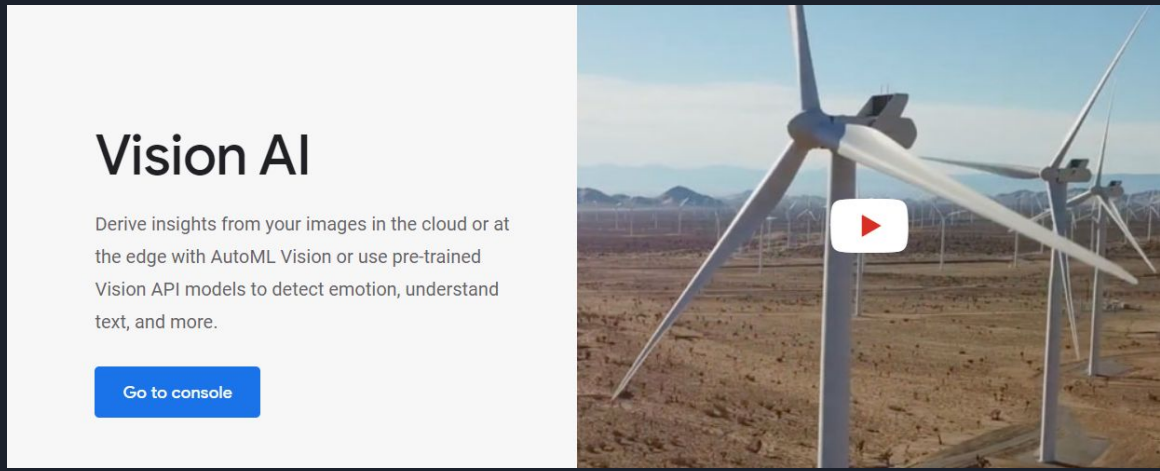
https://cloud.google.com/ai-platform/docs/technical-overview



Google Vision API

Vision AI | Derive Image Insights via ML | Cloud Vision API

- AI Introduction
- Try it in website!
- Check Json response
- Possible Applications
- Pricing
- SDK



Getting Started

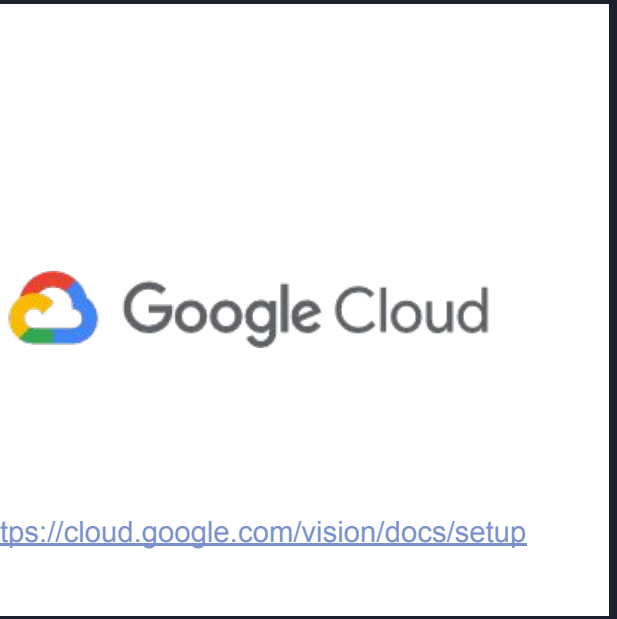
Google Console

Create a Service key.json

Authenticate

Use the API Vision

That’s all!



Demo Time!

https://github.com/robitec/lpr-gcloud

Pros & Cons

	Google Vision AI	Neural Labs ©
Pros	● Better General Model ● Pricing per Request ● SDK Easy to Integrate	● Better Specific Model ● Local Mode (DLL) ● Specific Functions
Cons	● Not Dedicated Model ● Internet Requirement	● Library Pricing ● Hard DLL (¯_(ツ)_/¯)

THANKS FOR WATCHING

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