

## Key Questions: 29.08.2022

1. How can we detect Word Elements properly? Current Options: Use API, develop on our own AI. Any Idea?
2. What kind of Text detection APIs are there on the market?

### **What are the alternatives to Vision AI (Google)?**

An analysis list on this topic, with open-source ones and commercial ones

3. Problem with Vision AI (Google)
  - a. Bad Text recognition
    - Q: How to build our own Text Recognition AI?
    - What do we have to consider theoretically?
    - What kinds of pre-defined models exist?
    - What kind of data do we need to train it better?
4. What technology can we use to stabilize the layer on an identified element?  
(What kind of tracking technology) It is like AR filter on face with the feeling of
  - a. Identifying
  - b. Stabilizing

## **Presentations**

[Translue x HWR - Building A Text Recognition AI.pdf](#)

[Translue - Elaboration - 12.09.2022.pdf](#)

## **Papers**

[Image Classification with Variable Input Resolution in Keras](#)

[Context-Free TextSpotter for Real-Time and Mobile End-to-End Text Detection and Recognition](#)

[STN-OCR: A single Neural Network for Text Detection and Text Recognition](#)

[Contextual Text Block Detection towards Scene Text Understanding](#)

[R-YOLO: A Real-Time Text Detector for Natural Scenes with Arbitrary Rotation](#)

[Look More Than Once: An Accurate Detector for Text of Arbitrary Shapes](#)

[Training CNNs using high-resolution images of variable shape](#)

[Enable Deep Learning on Mobile Devices: Methods, Systems, and Applications](#)

[Distilling the Knowledge in a Neural Network](#)

### **Evaluating existing OCR tools:**

[MLKit OCR evaluation - March 2022](#)

[Punjabi Text Recognition System for Portable Devices: A Comparative Performance Analysis of Cloud Vision API with Tesseract - Aug. 2021](#)

[Which OCR toolset is good and why?A comparative study - Apr. 2020](#)