Hensor flowers

Dataset

How big is the annotated dataset at our disposal?

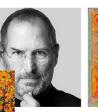
- Sketches with matches in artworks

Enlarge with transfer learning

- Sketchify real life images.









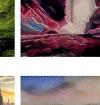
















How to

What to focus on with recognizing flowers

- Shape
- Color
- Outline

More detailed if result are insufficient

- Segmentation
- Recognize parts of flower

CV methods

- Object detection
 - Detect flowers and draw a box around it, with percentage of how sure Al
- Panoptic segmentation
 - Combination of semantic and instance segmentation
 - Pixel level classification with separate instances

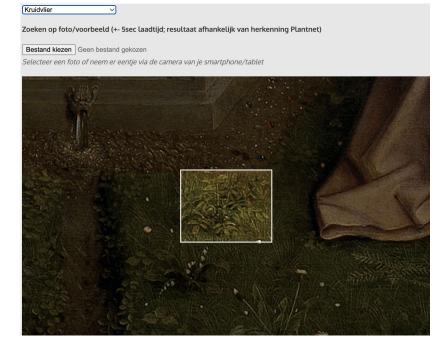


What already exists

- Flore de gand
 - Examine their dataset
- Roboflow
- YoloV5

Flore de gand

- Recognize plants on Lam gods
- Find info about said plant
 - Recent photos



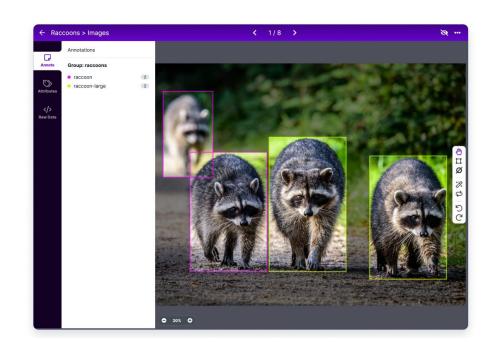
Roboflow

Very easy to use app

- Annotating
- Training/testing

Has been used for classification

- Daisies and dandelions
- 1.5K images
- 96% accuracy



YoloV5

- Family of pre trained object detection architectures and models.
- Should work great on artworks
- Does not need a lot of data



What's next

- Compare datasets from Krishna and Lara
- Working with Krishna's code
- Applying code to Lara's dataset
- Testing
 - Roboflow
 - YoloV5
 - Al trained on Lara's dataset
- Improving
 - Dataset
 - Code
 - Try segmentation

Vision

- Make AI do (partial) automatic annotations
- Lower the amount of manual annotating that has to be done