

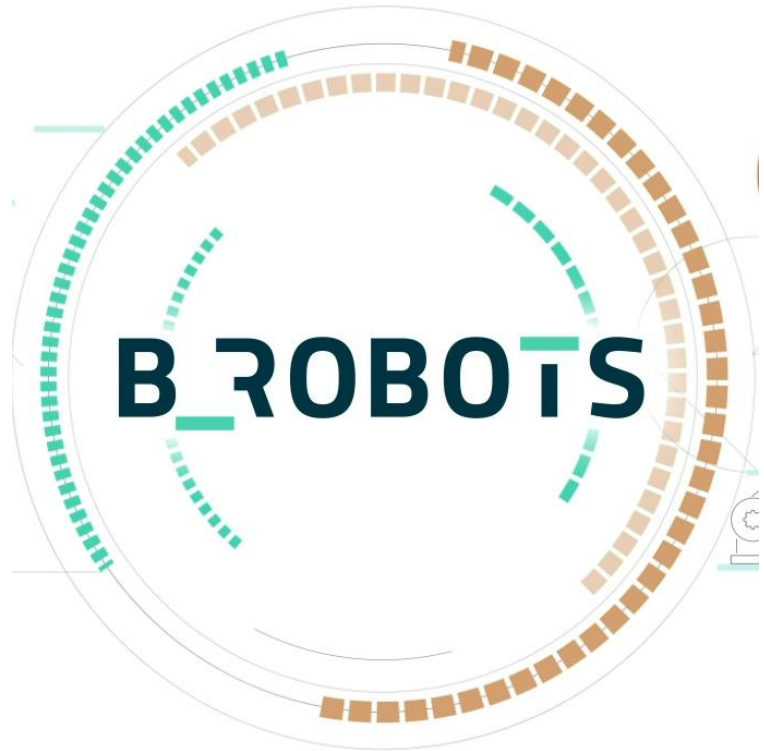


# B-ROBOTS

## Internship B-robots

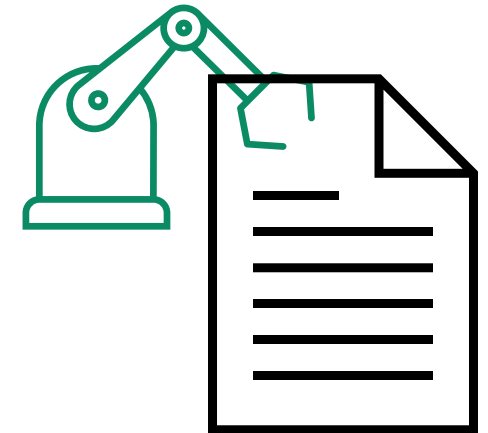
- Ebran Lenaerts
- R0661627
- 2023

# What they do



- Automate user intensive processes
- Relieve employees of time-consuming activities
- Implementing Intelligent Automation
- Help maintain RPA bots over time

## Data Extraction from Documents

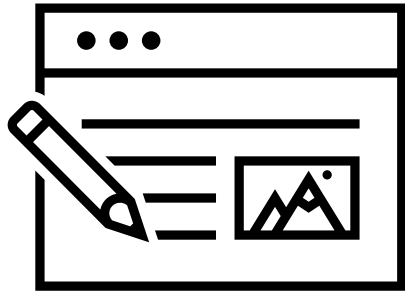


1. Pre-process image

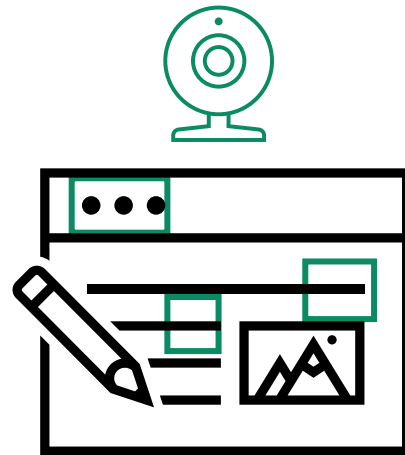
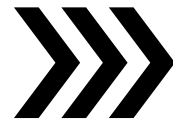
2. Perform OCR

3. Apply NLP on  
extracted text

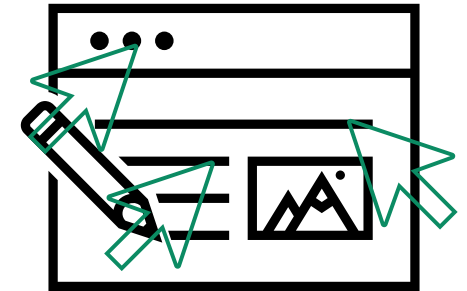
# Brightest Testing Framework



1. Screenshot Page



2. Detect Web Elements



3. Interact using Framework

# Tools used



# Google's Tesseract OCR

- Image pre-processing to extract as much text in the best possible state as possible
- Followed by tokenizing the resulting text



# Doccano

## Annotator

- Annotate images of different web elements
- Annotation data will be turned into YOLO format
- Documents annotated for training of NLP model



# GUI in Streamlit

- Easy to use
- Easy to deploy
- Fast changes possible depending on needs



Streamlit

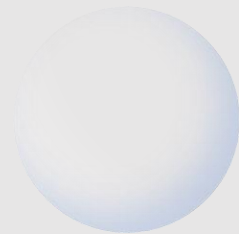


# Solutions



SpaCy multi-lang  
transformer model to  
perform Span  
Categorization and  
NER

spaCy



# YOLOv8 CV Model

- Dataset creation from annotations and images
- Load model from Huggingface
- Finetuning YOLOv8 model with custom dataset to detect web elements



Huggingface logo