

## Digitalization of Technical Drawings using Deep Learning

Task

Implement a deep learning model to digitalize the content of technical drawings:

- Get to know with scene text detection task.
- Get familiar with TensorFlow.
- Annotation of the technical drawing of bridges and buildings.
- Train a YOLO [1, 2] model for the scene text detection task.
- Use OCR for digitalization of the detected texts and numbers.

Project CharacteristicsModeling:Mathematics:Programming:Science:



Detected sections in a technical drawing

[1] Bochkovskiy, A., C.-Y. Wang, and H.-Y.M. Liao, Yolov4: Optimal speed and accuracy of object detection. arXiv preprint arXiv:2004.10934, 2020. [2] Redmon, J. and A. Farhadi, Yolov3: An incremental improvement. arXiv preprint arXiv:1804.02767, 2018.

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