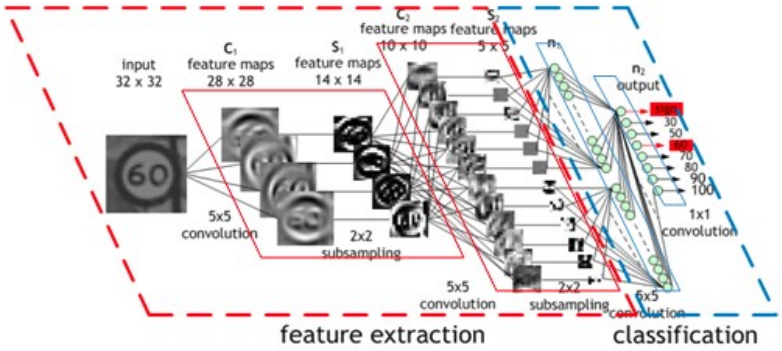
Text detection and extraction using Deep Learning

Text detection in natural scene images is an important preprocessing for many content-based image analysis tasks.

This project will employ deep learning techniques to detect and extract text appearing in natural images. Using deep convolutional neural network (CNN) we will extract useful semantic features that characterize text, and will then use those to identify embedded text in real-world scene images.



Deep learning is a set of brain-inspired algorithms that involves deep multi-layered neural networks. These neural networks are trained to find a set of features that represent the fed data, thus allowing machine learning and computer-vision usages such as classification and detection. This approach is currently the state-of-the-art in the field of computer-vision, voice recognition and NLP, and used by Google, Microsoft, Yahoo and more.

Prerequisites:

- Machine learning course
- Good Programming skills and experience
- Computer vision\ GPGPU knowledge – advantage

For more details:

Elad Hoffer – ehoffer@tx.technion.ac.il