

Deep Learning Based Car License Plate Recognition

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Input Image

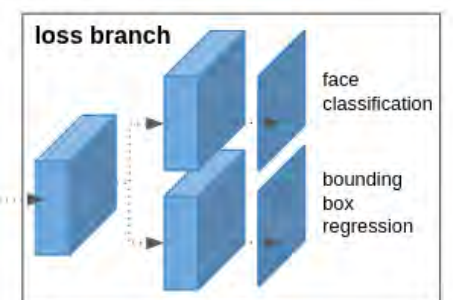
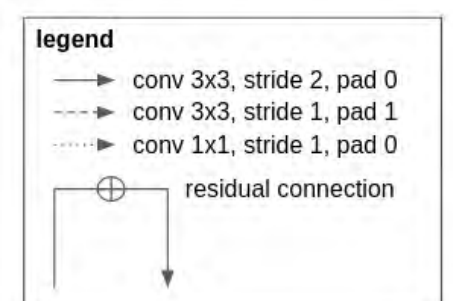
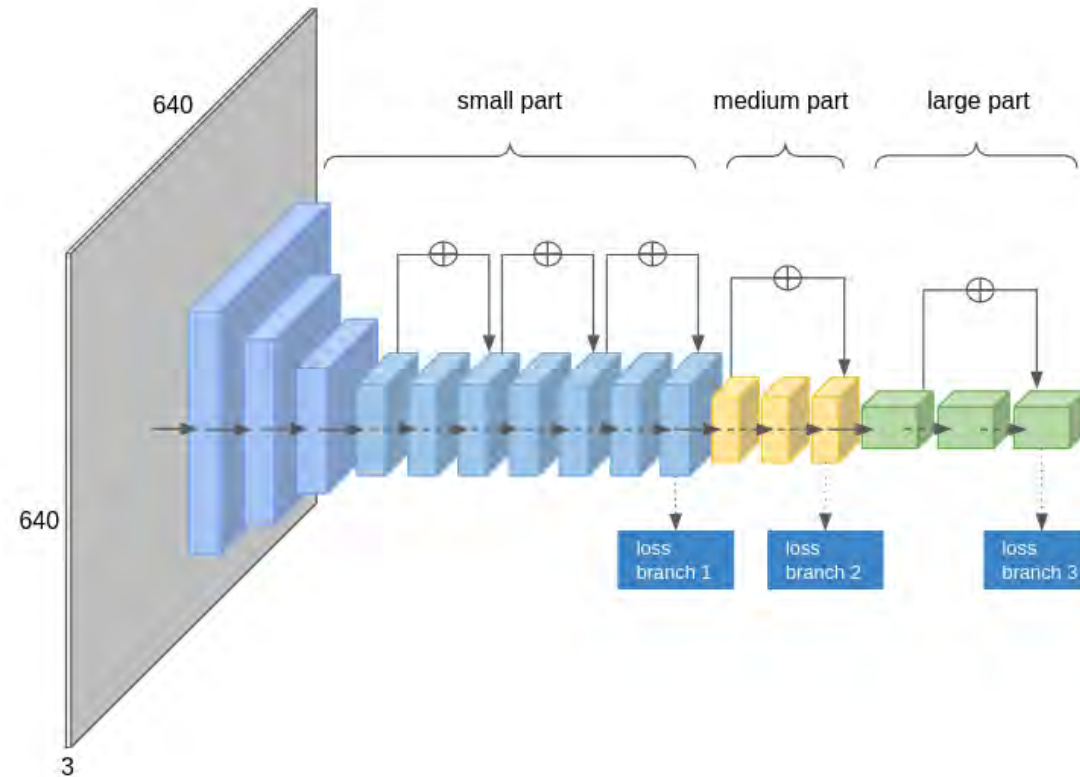


License Plate Recognition System

- light: models have combined size of 7.6 MB (suitable for usage on roadside cameras)
- fast: takes 82 ms to process one image
- decent accuracy: 86.04%
- uses the following CNNs

LFFD (license plate detection variant)

- able to detect license plates of varying scales
- size: 3.8 MB (948498 model parameters)
- speed: 57 ms per image on Intel Core i7-9750H CPU (17.54 FPS)
- average precision: 98.99%



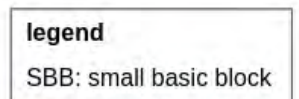
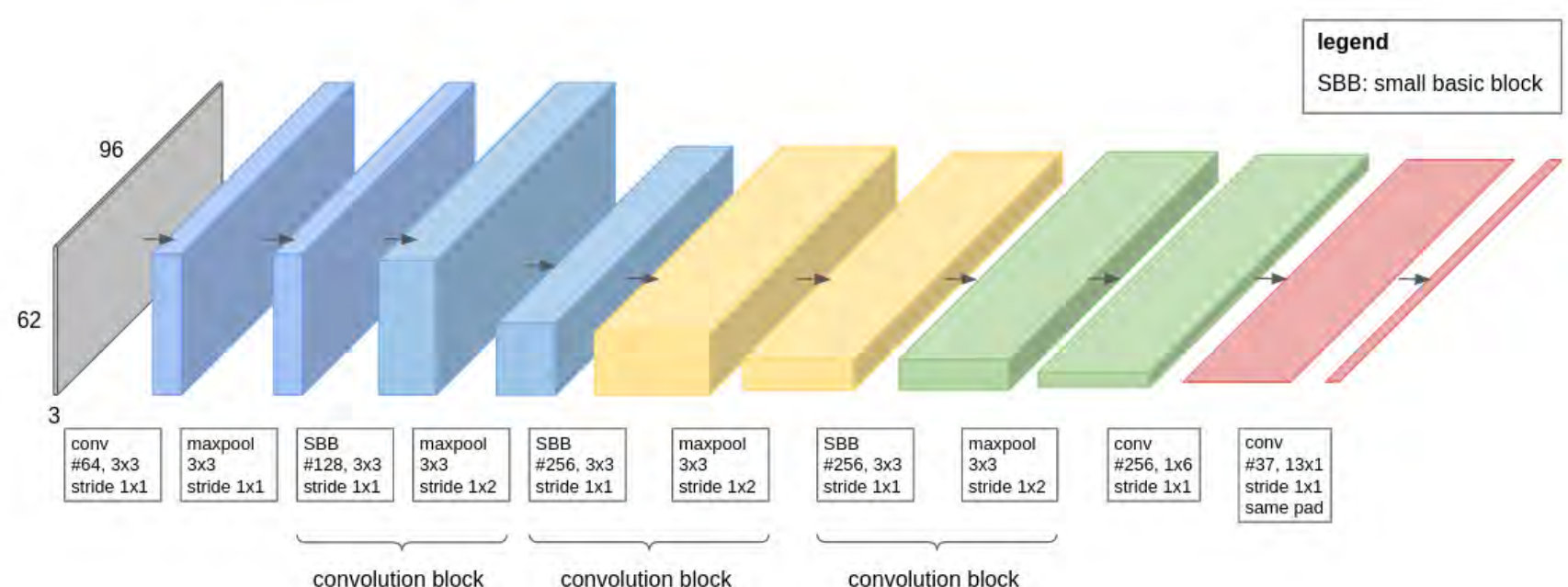
detection

License Plate Image



LPRNet (with modified architecture)

- input size increased to handle two-row license plates
- size: 3.8 MB (930307 model parameters)
- speed: 24 ms per image on Intel Core i7-9750H CPU (41.66 FPS)
- accuracy: 93.79%



recognition

License Plate Number

SJM7185S