

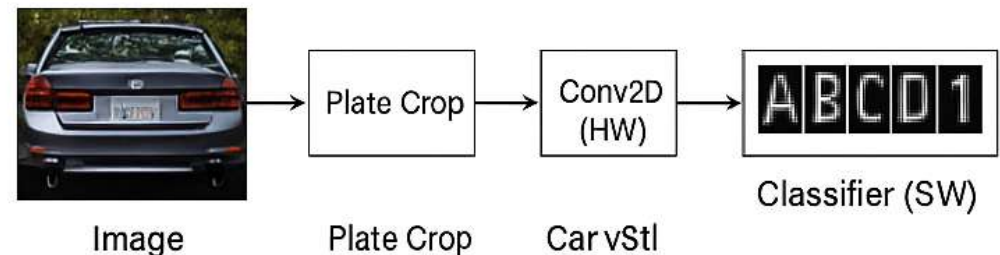
Accelerating CNN Inference for License Plate Recognition in Verilog

What are you trying to do?

- Recognize license plate characters using a CNN

How have others done it?

- Keras/PyTorch for CNN inference
- Edge TPUs / FPGAs for acceleration
- ASICs like Google's TPU for large-scale CNNs



What are you doing differently?

- Implementing Conv2D in Verilog from scratch
- Simulating a hardware-software hybrid; hardware Conv2D + software classification
- Designed for license plate images, not generic datasets

What have you accomplished so far?

- Trained CNN to classify characters
- Built and simulated Conv2D + ReLU + MaxPool in Verilog
- Developed full pipeline: input image → segmented characters → CCNN → output string