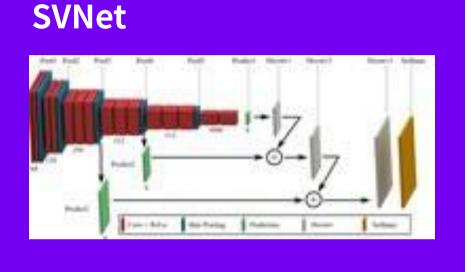
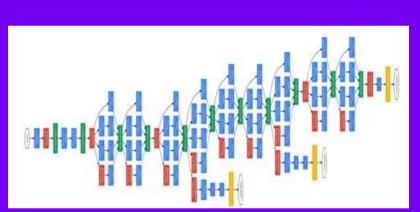
# How to support Customers?



STRADVISION has a couple of simulators and tools to support on R-Car.

#### Input (CNN model)







#### R-Car HW, its structure, spec

- Renesas V3M
- Renesas V3H
- FPS, camera resolution
- Detection range, ROI
- Memory B/W
- Computing device usage
- The size of binary
- Power consumption
- Etc.

### **Network optimization**

Pruning/Compression Split/Merge of sub-layers Transformation

Ex.  $3x3 conv \rightarrow 5x5 conv$ FC Layer → 1xk conv

- **System Optimization** Hotspot analysis
- Computation offloading
- DMA/internal memory optimization

### **STRADVISION Optimization**

#### **Code generation** Host code in C/C++ Compute primitive machine code CL(Command List) for R-car platform

#### **CNN** engine

Host framework, Pipeline optimization (from image input to meta data of detection/recognition results)

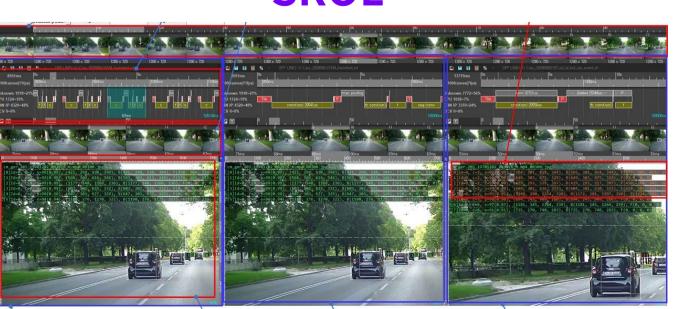




**Off-Line Simulator Bit Exact** with Output of R-Car HW

> **Stradvision Renesas** Object Logging.

#### **SROL**



#### Output



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