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Optim 1

Image Signal
Processing
(ISP)

Skip ISP stages
(compute-centric)

Optim 2

JPEG Encode

Variable Q Factor
(data-centric)

Optim 3

Control
(C)

Modeling
approximation
error as sensor
noise



Explore Platform
Mappings

2

CPU_1C
CPU_4C
CPU_8C,
CPU_8C+GPU



Sensitivity to different
environmental scenarios

3

Day, Night
Dawn, Dusk
Fog, Snow



Failure
probability (FP)
analysis

4

Based on
Monte-Carlo
simulation