Open Compound Domain Adaptation

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Compound Heterogeneous Domains

- Cloudy
- Rainy
- Snowy

Simulation

Source

Target
Compound Heterogeneous Domains

Simulation

Source

Cloudy

Rainy

Overcast

Snowy

Open Unknown Domains
Simulation

Open World Driving Conditions
Source

Simulation

Compound Targets

Open World Driving Conditions

Cloudy

Rainy

Open Targets

Overcast

Continuous Adaptation
C-Digits Benchmark
Absolute Performance Gain: ~5%

C-Faces Benchmark
Absolute Performance Gain: ~10%

C-Driving Benchmark
Absolute Performance Gain: ~2%

C-Mazes Benchmark
Absolute Performance Gain: ~30%
New Task
Open Compound Domain Adaptation (OCDA)

New Approach
Instance-wise Curriculum + Domain Memory

New Benchmarks
C-Digits, C-Faces, C-Driving, and C-Mazes
Thanks!

Code, models and benchmarks are available at