Abstract
This work addresses the problem of semantic scene understanding under foggy road conditions. We propose a novel method, which uses purely synthetic data to improve the performance on unseen real-world foggy scenes captured in the streets of Zurich and its surroundings. Our results highlight the potential and power of photorealistic synthetic images for training and especially fine-tuning deep neural nets.

Contributions
• a purely synthetic, photorealistic, foggy dataset containing 25,000 unique outdoor scenes provided in five fog density levels => 125,000 images in total
• we show that with this data we outperform all previous methods on real-world, foggy data
• we show that a combination of purely synthetic and partially synthetic data can further improve the performance on real-world, foggy data

Comparison

Results

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