

Statement concerning the entry:

This animation aims at realistic visual simulation of outdoor scenes. In order to render photo-realistic images such as wet road surfaces, solar penumbra, streaks of light, etc. the following novel techniques are employed:

- (1) A procedural bump mapping technique for modeling road surfaces and reflection model for rendering wet road surfaces and puddles.
- (2) A shadow model with penumbra effects taking into account the size of the sun.
- (3) A diffraction model of the pupil and eyelashes for rendering blooming effect and streaks of light.

For details of our rendering techniques the following papers are available:

- (1) and (3): E. Nakamae, et al. "A Lighting Model Aiming at Drive Simulators," Proc. SIGGRAPH '90.
- (2): S. Takita, et al. "A Simple Rendering for Penumbra Caused by Sunlight," Proc. CG International '90.

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References

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