



**Realistic Image synthesis**

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# My background



- Past
  - Ing. at FEE CTU – Computer graphics
  - Hobby 3D computer graphics artist
- Present
  - Ph.D. Candidate - Charles university
  - Field of study: Realistic image synthesis
  - *Corona renderer* development

# 3D computer graphics art



- Use specialized software to get nice images (renders) from models
- Usage: movies, visualizations, animation, ...



# Realistic image synthesis

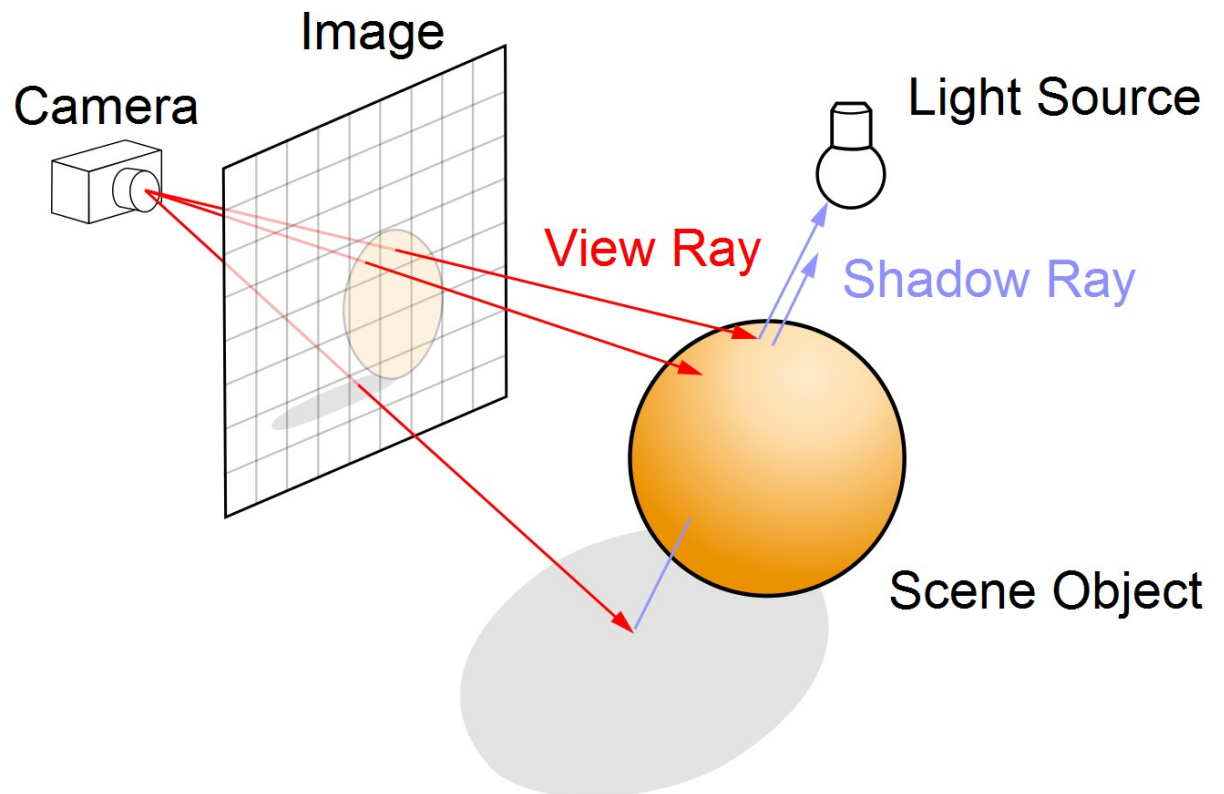
- Goal: create software for these tasks
- Method used: light propagation simulation

- Easy part:

- How

- Hard part:

- Efficiency
  - Speed



# My research



- Focusing on the hard part – efficiency in “hard” scenes
  - Complicated geometry, materials, ...
- Current project
  - Adapt work distribution to light distribution in scene
  - With Jirka Vorba, Jaroslav Křivánek



# The future



- If success: “hard” scenes eliminated → more freedom to artists
- Target publication venues: SIGGRAPH, Eurographics

