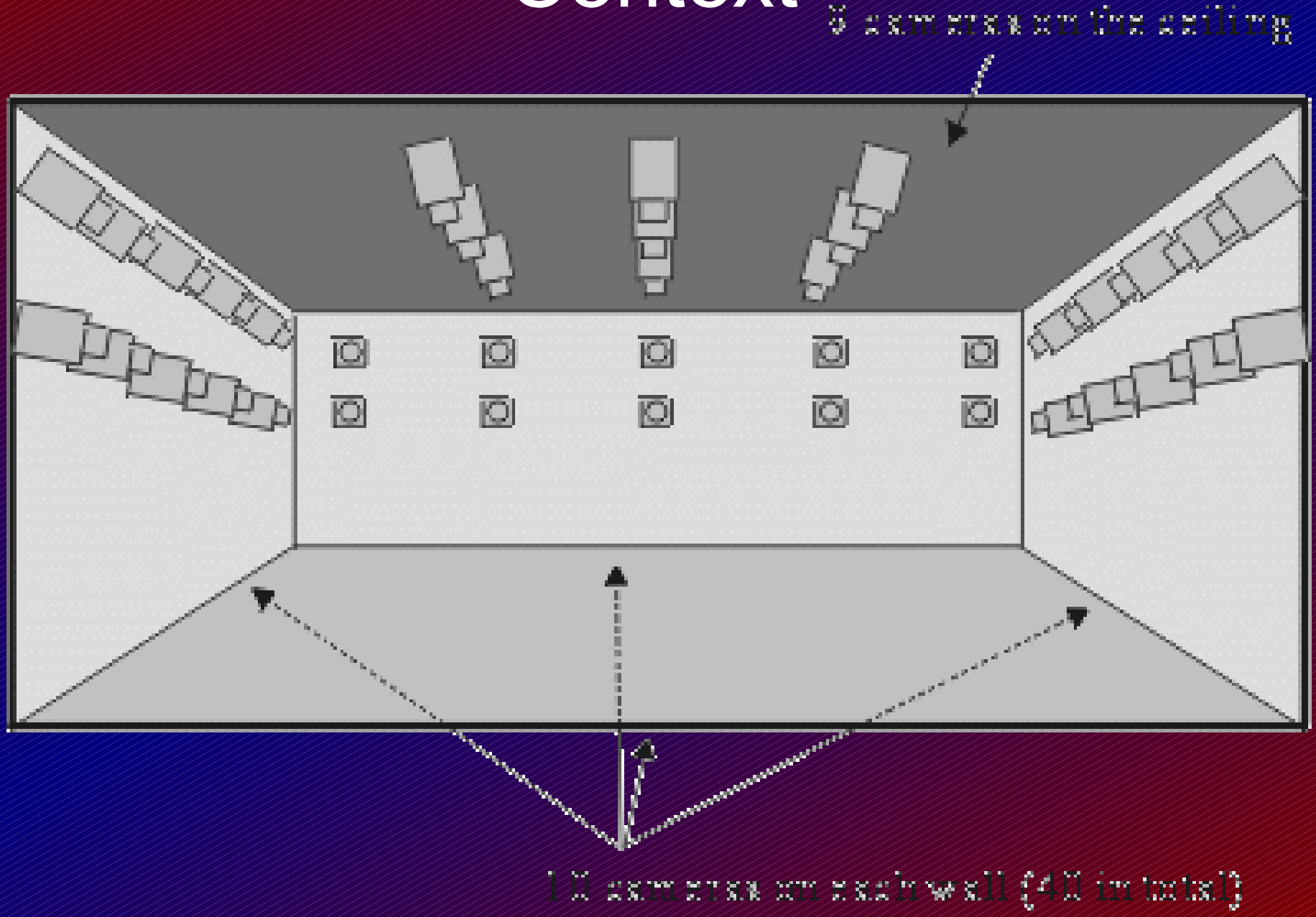
A capturing system for the reconstruction of dynamic 3D



A capturing system for the reconstruction of dynamic 3D

- Context
- Goals
- Pipeline layout
- System design
- On-line processing
- Results

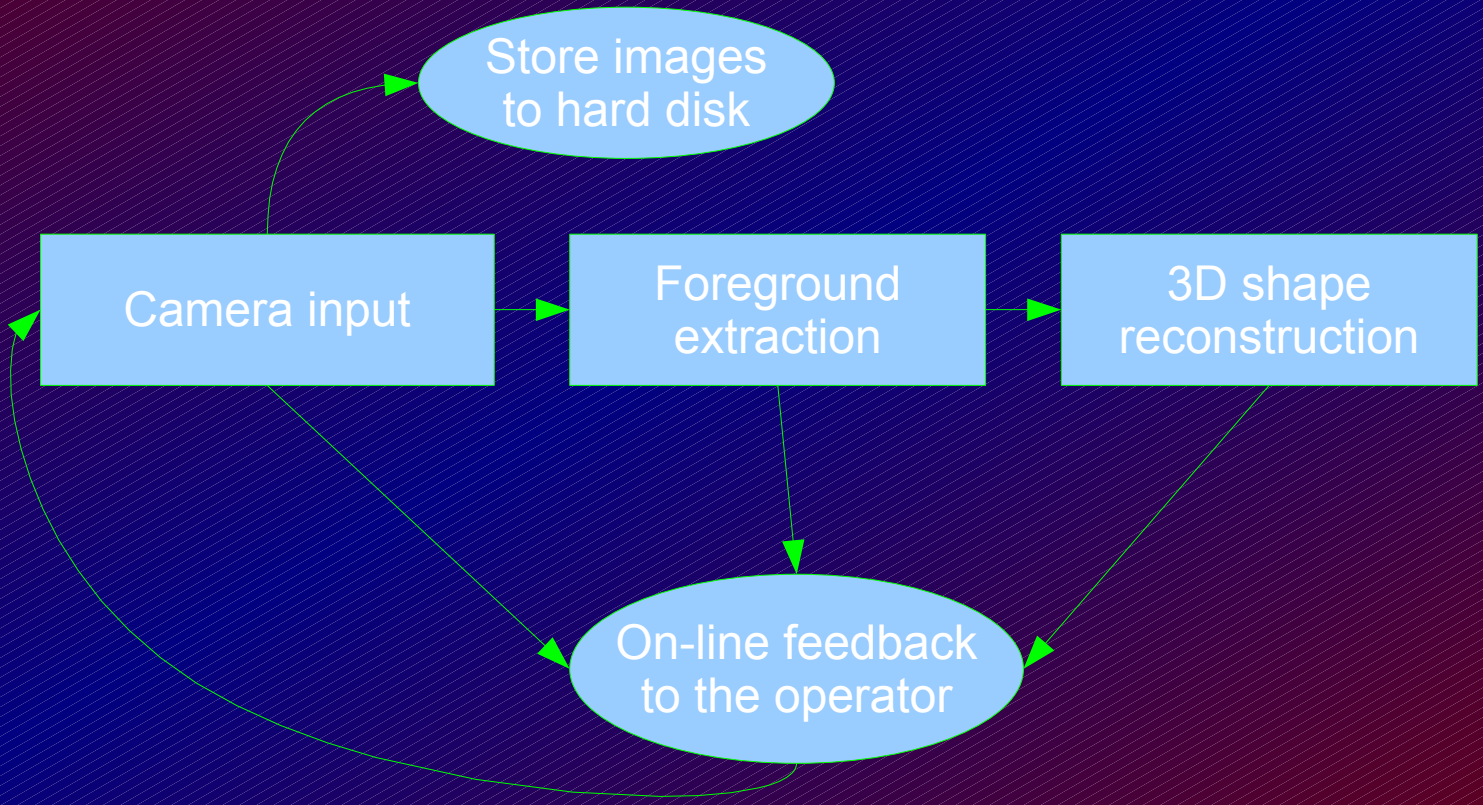
Context



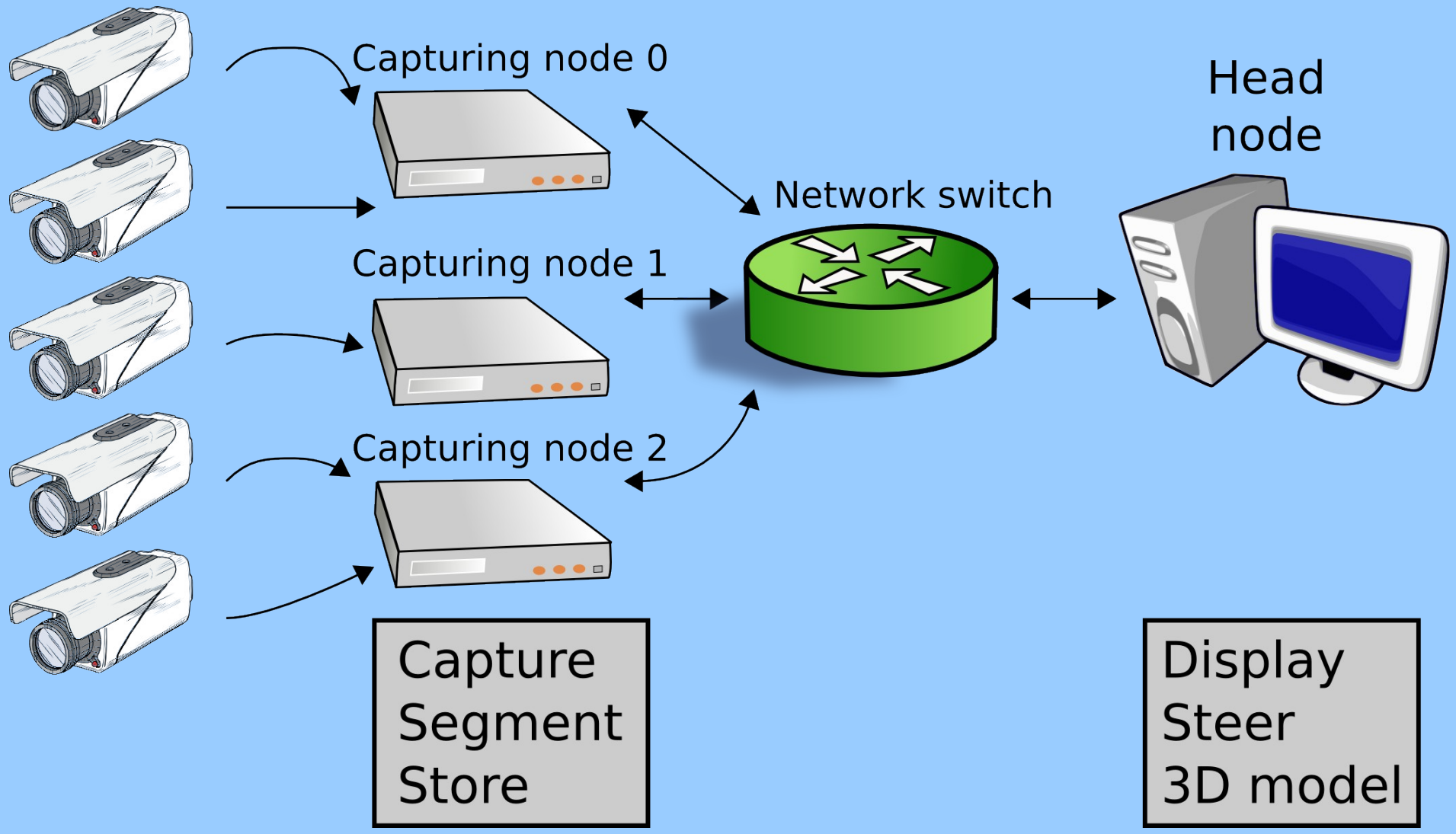
Goals

- Previously:
  - static system
  - made for a specific room
  - controlled lighting
  - output either suffers from aliasing or cannot be computed reliably
- Goals:
  - transportable system
  - usable in many different places
  - suitable for outdoors
  - concise, reusable model output that can be computed robustly

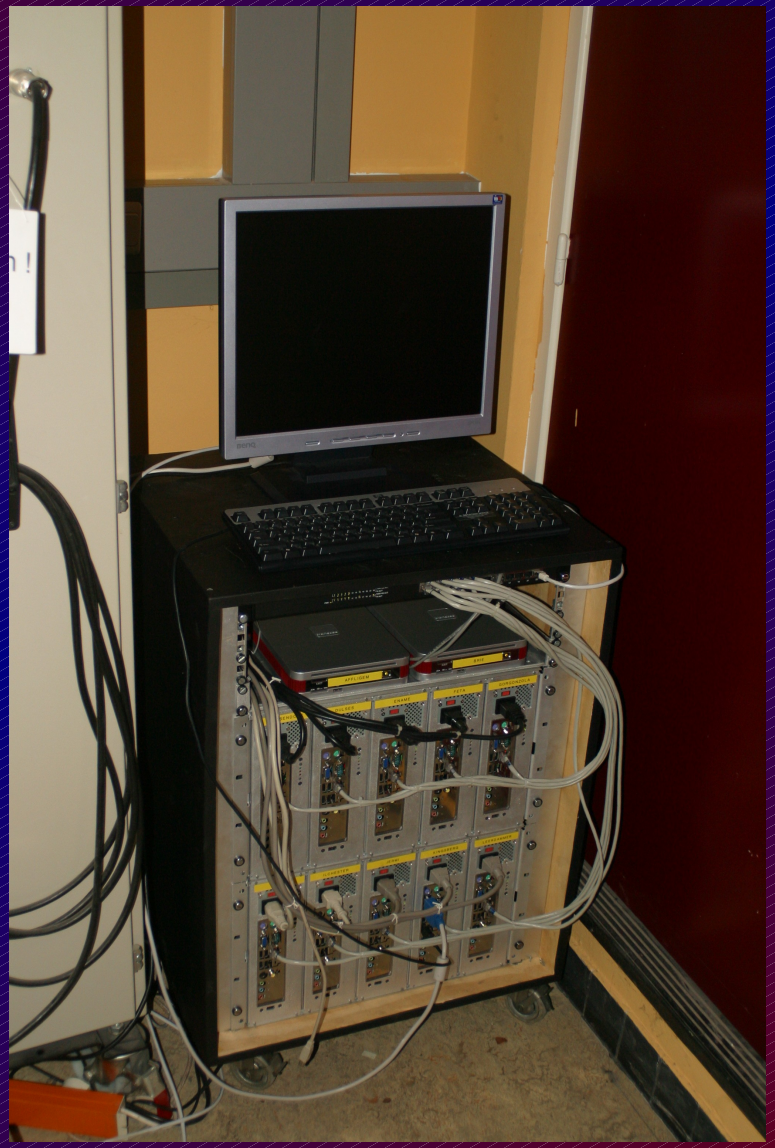
Pipeline layout



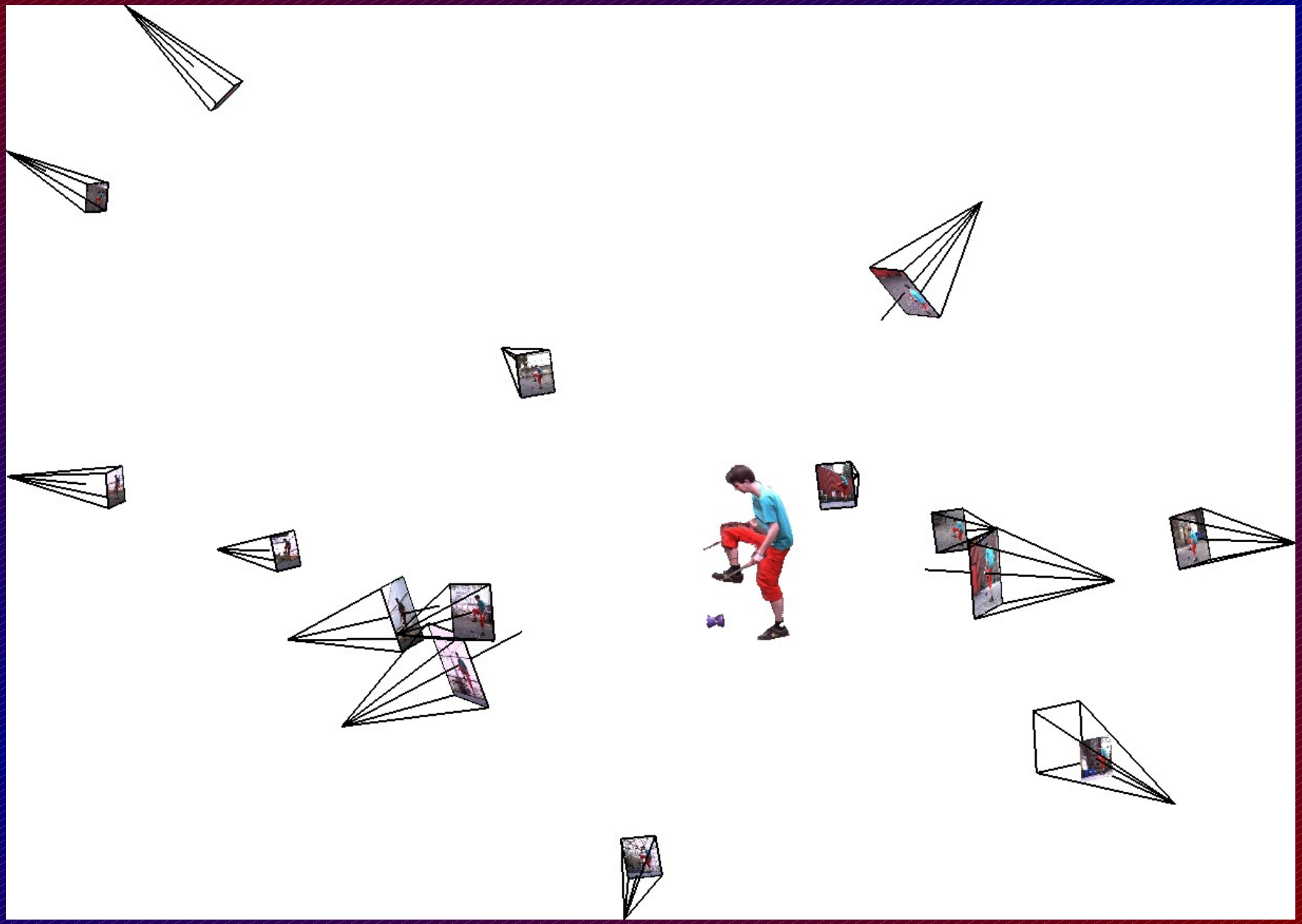
System design



System design



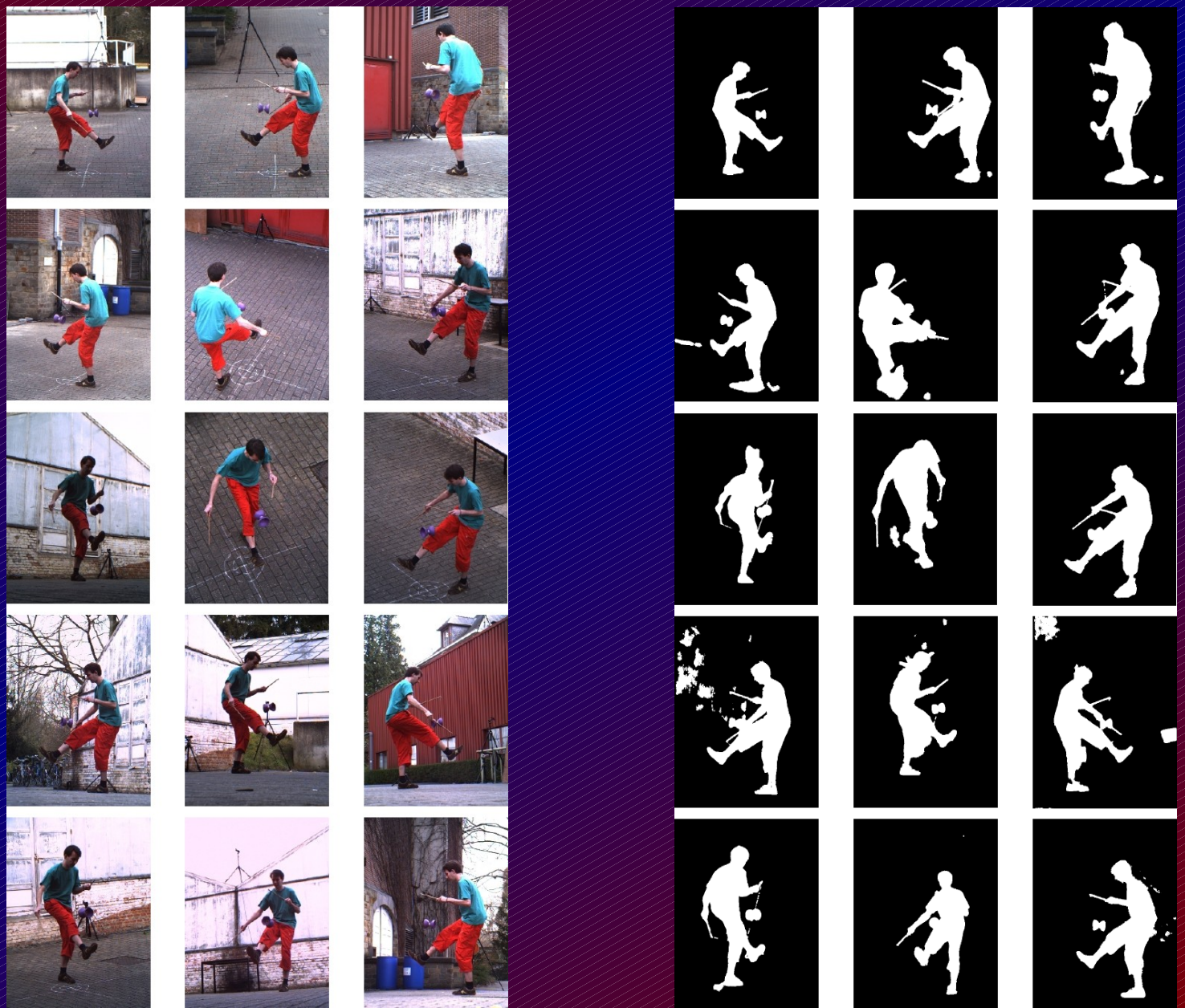
System design



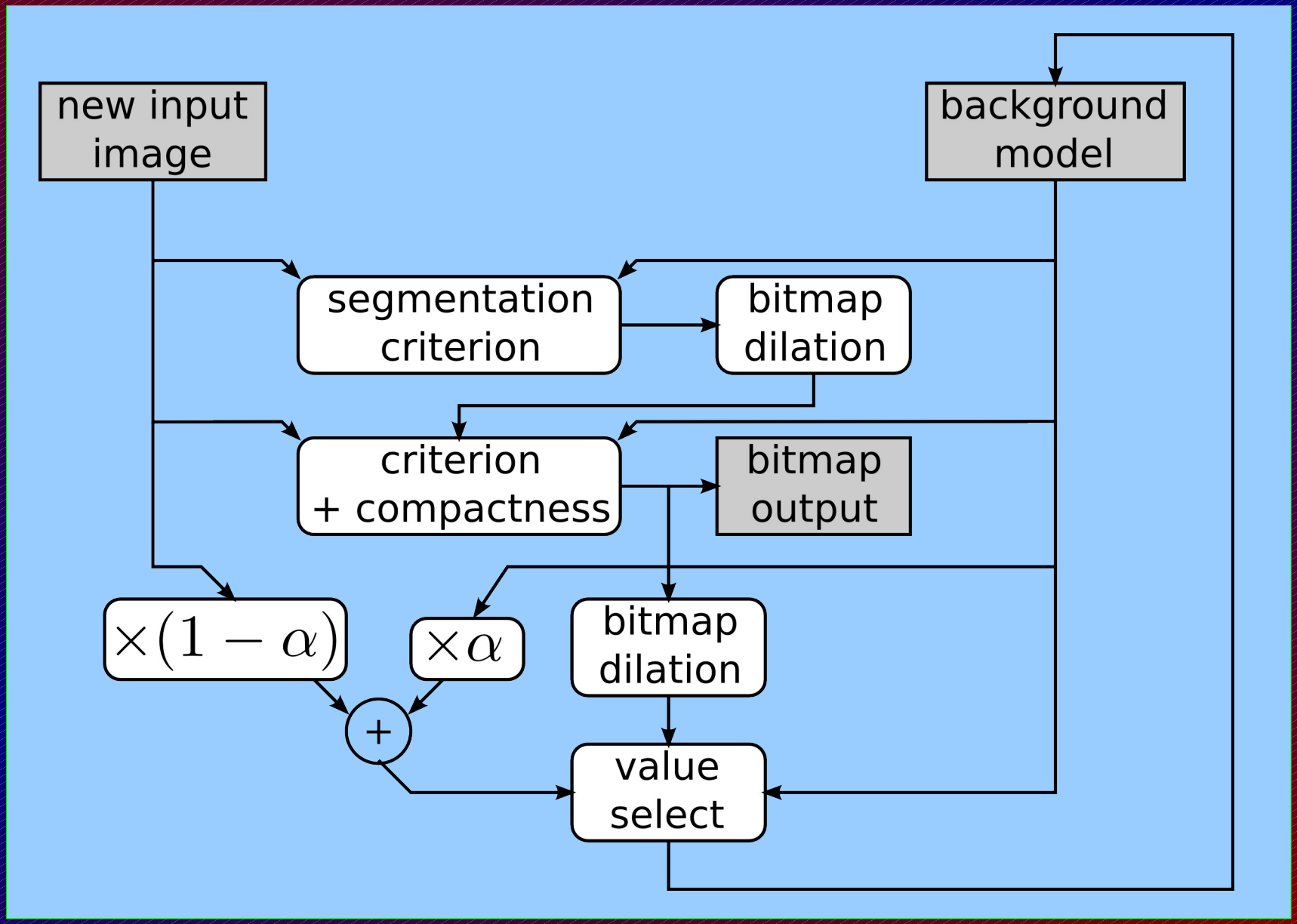
On-line processing

- Part 1: foreground / background segmentation
- Part 2: fast 3D object shape approximation

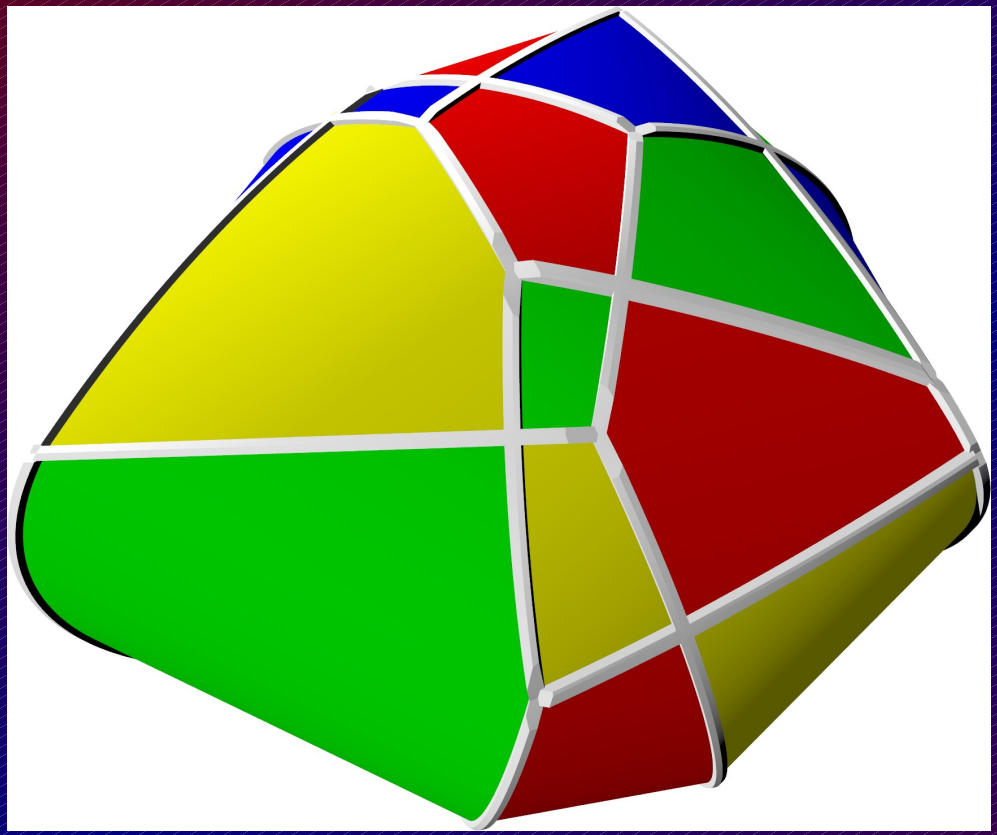
On-line processing: fore-/background segmentation

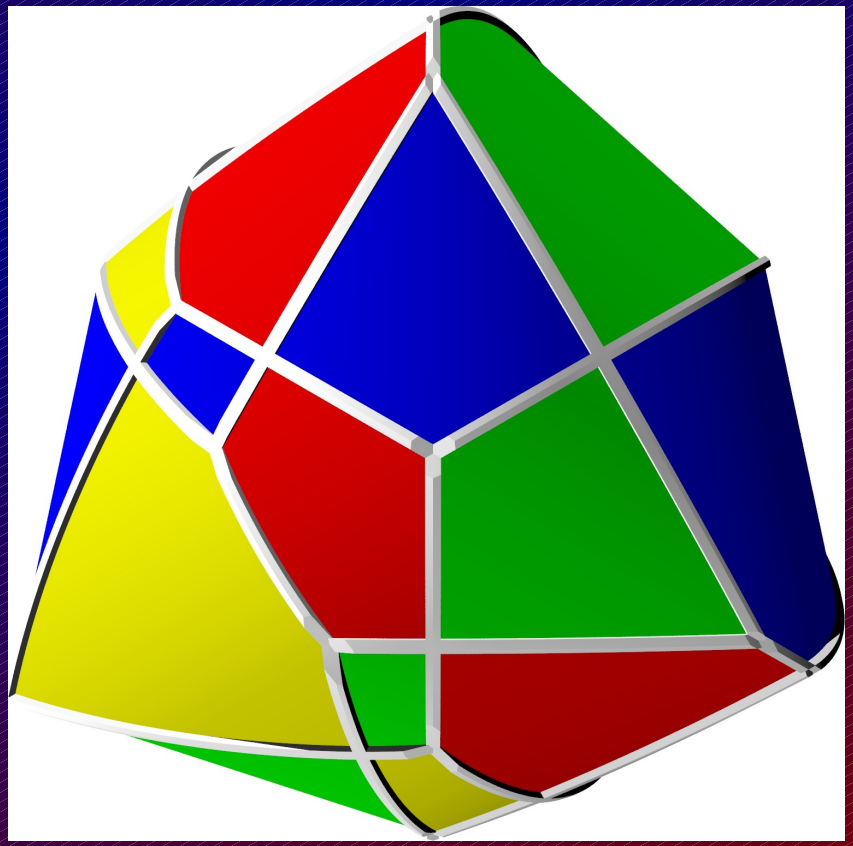


On-line processing: fore-/background segmentation



On-line processing: 3D shape estimation





On-line processing: movie