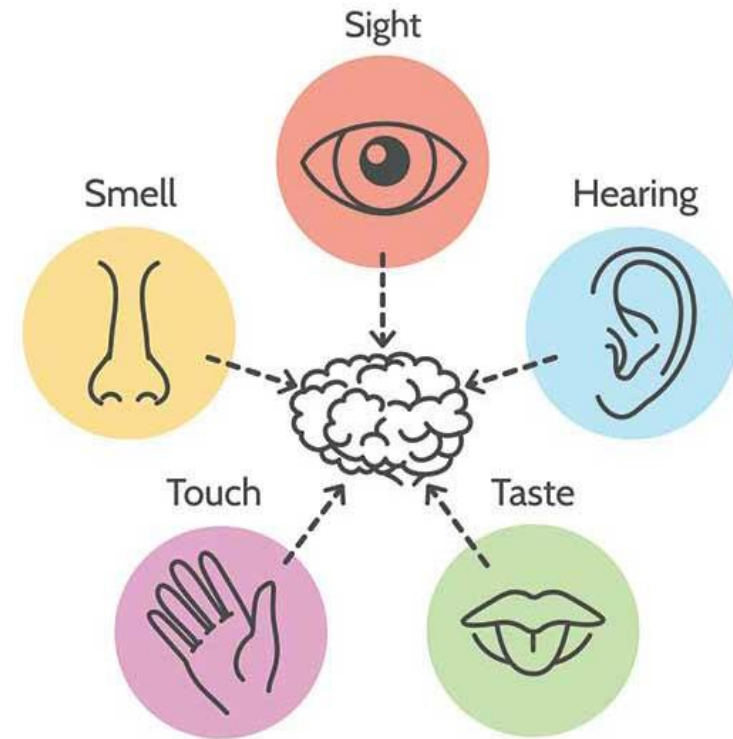
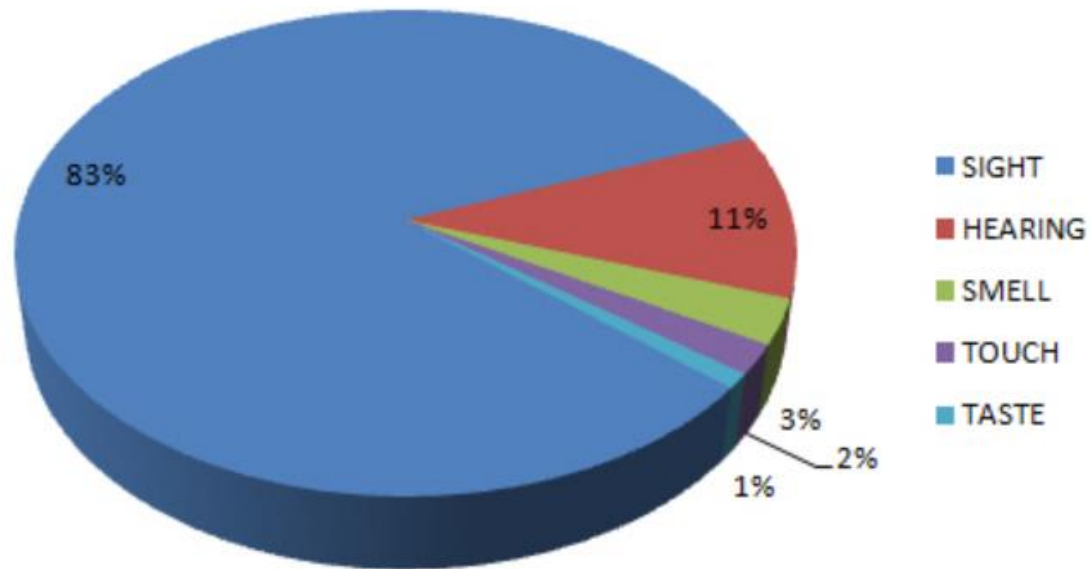


Learning-based Visual Synthesis

Lu Ming (陆鸣), Vision and AI Lab, Intel Labs China

Introduction of Visual AI

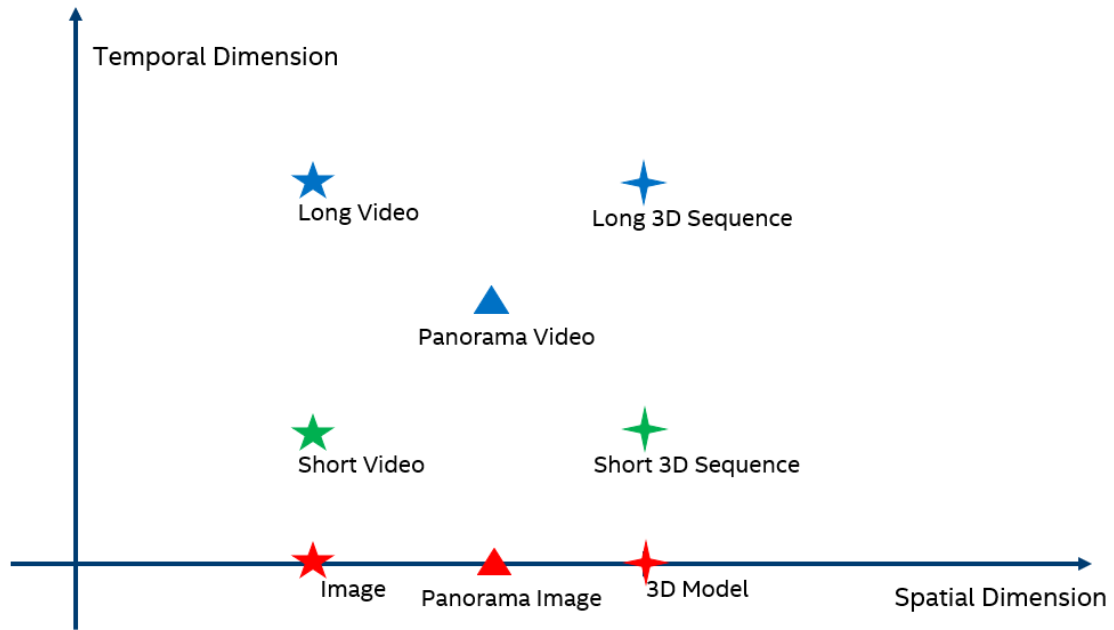
➤ Visual Content



Visual Content is responsible for most of the information from five senses

Introduction of Visual AI

➤ Visual Content



Visual Content



Image



3D Model



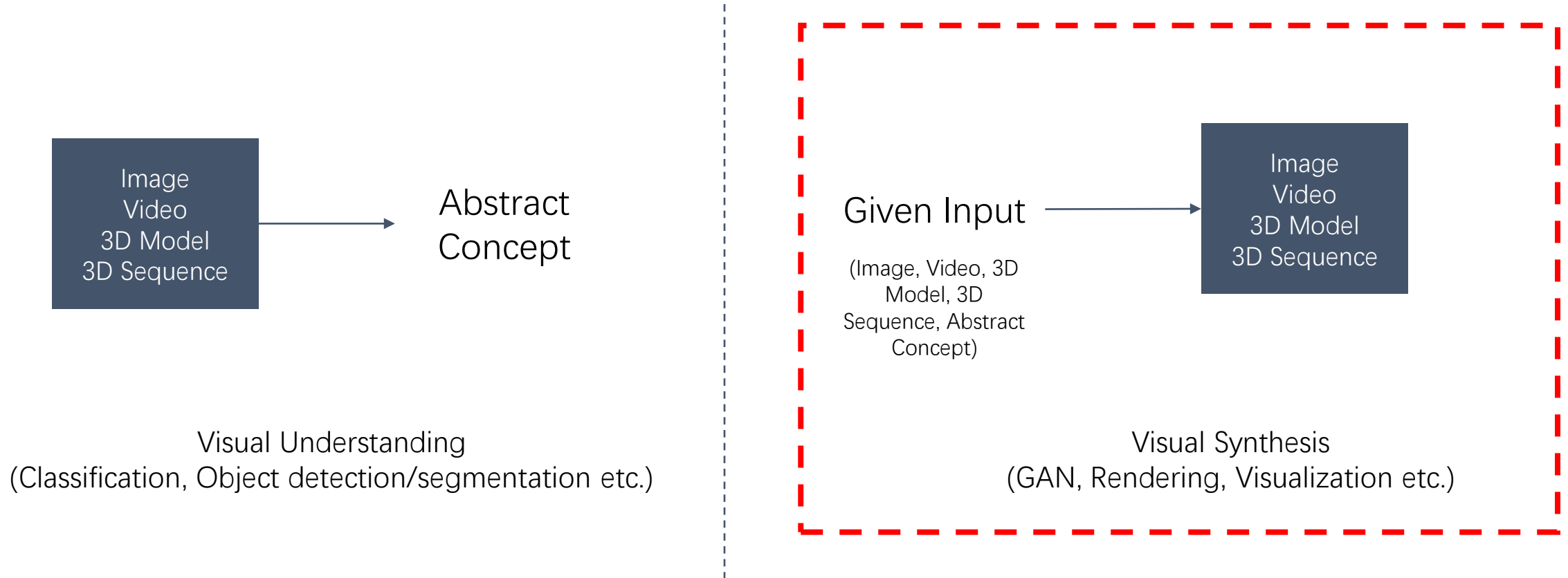
Video



3D Sequence

Introduction of Visual AI

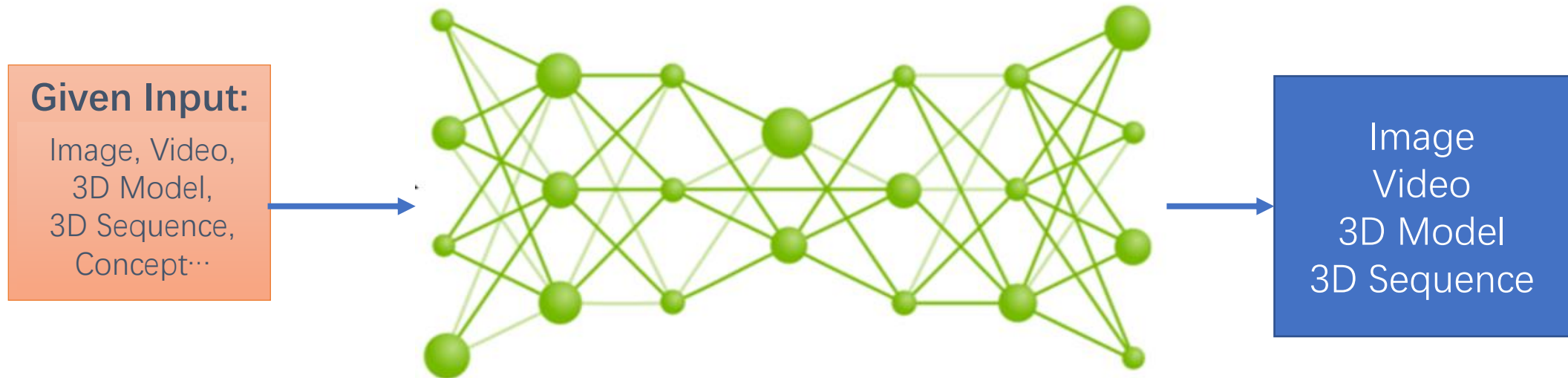
- Visual AI (Visual Understanding and Visual Synthesis)



My research goal is developing high-quality/efficient/scalable/intelligent AI models for visual synthesis systems.

Introduction of Visual AI

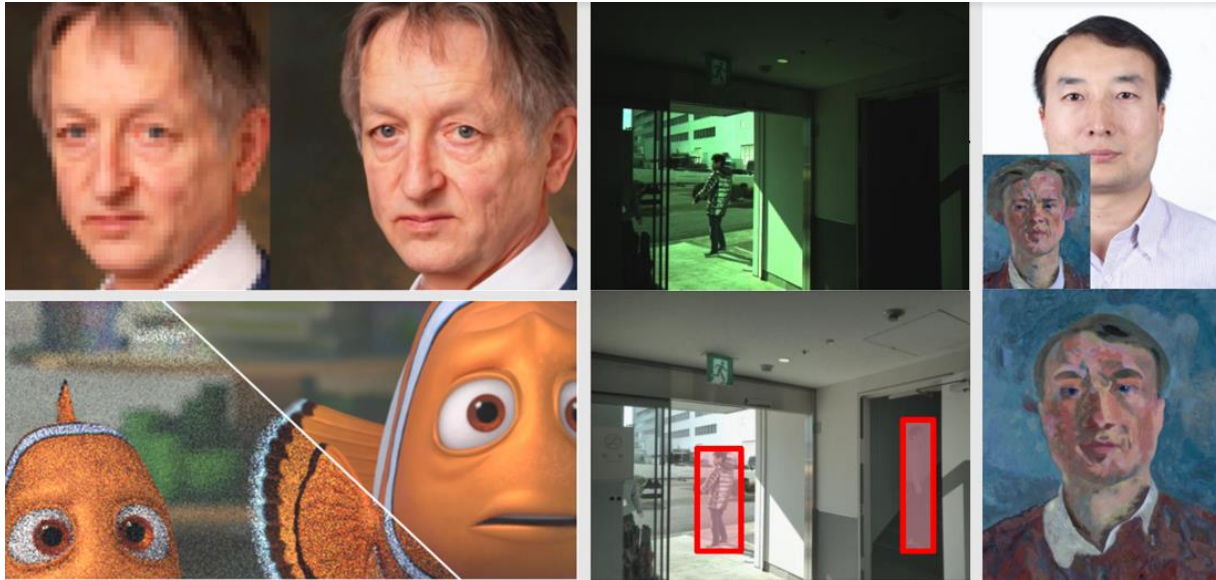
➤ Learning-based Visual Synthesis



Learning-based Visual Synthesis
(GAN, Rendering, Visualization, etc.)

Introduction of Learning-based Visual Synthesis

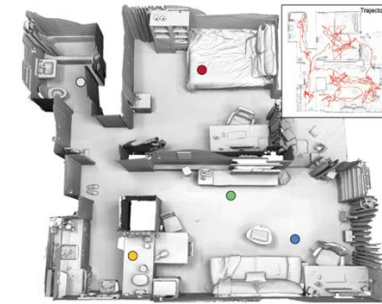
➤ LVS Applications



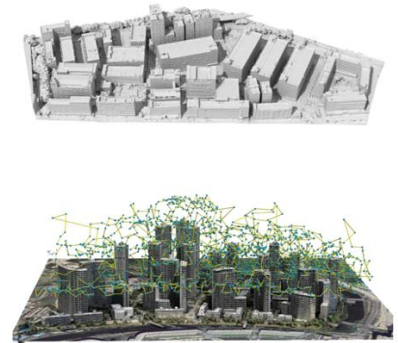
2D Capture and Enhancement
(SR, Deblurring, Denoising, ISP, Style Transfer, etc.)



3D Human Capture
(3D Face, 3D Body, etc.)



3D Indoor Capture



3D Outdoor Capture

3D Capture and Enhancement
(3D Human/Indoor/Outdoor/etc.)