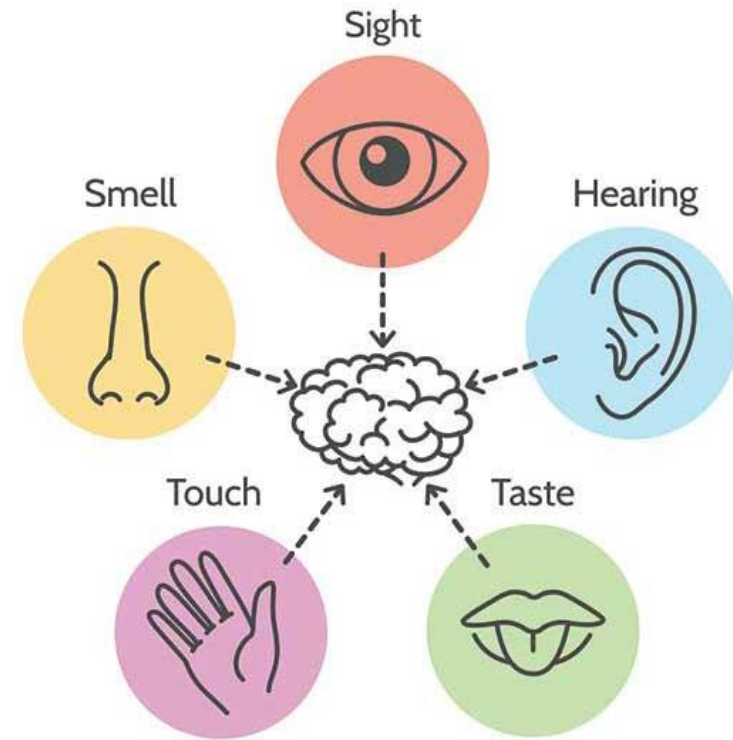
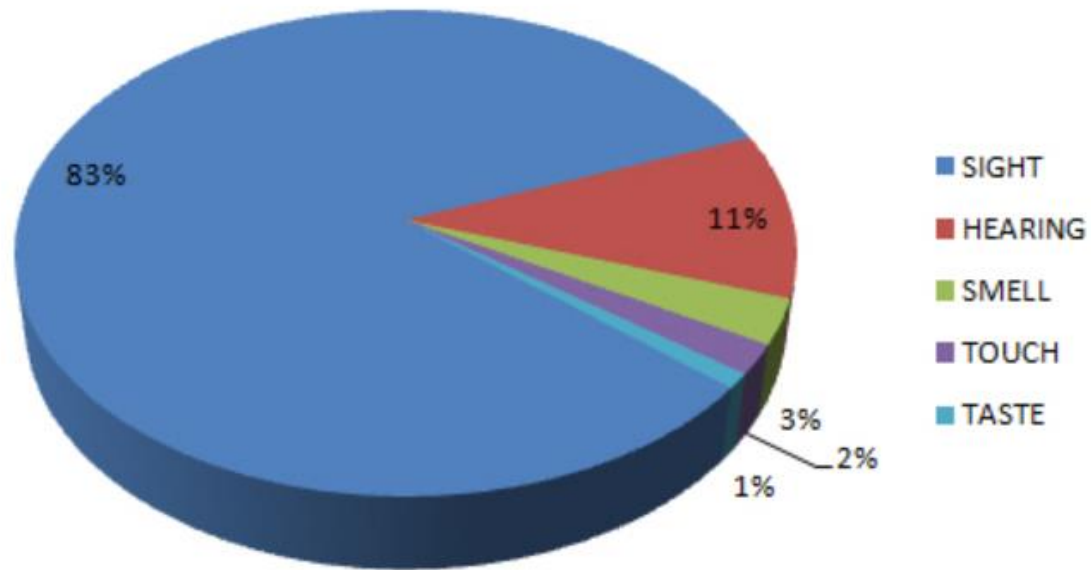


Learning-based Visual Synthesis 2.0

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

Introduction of Visual AI

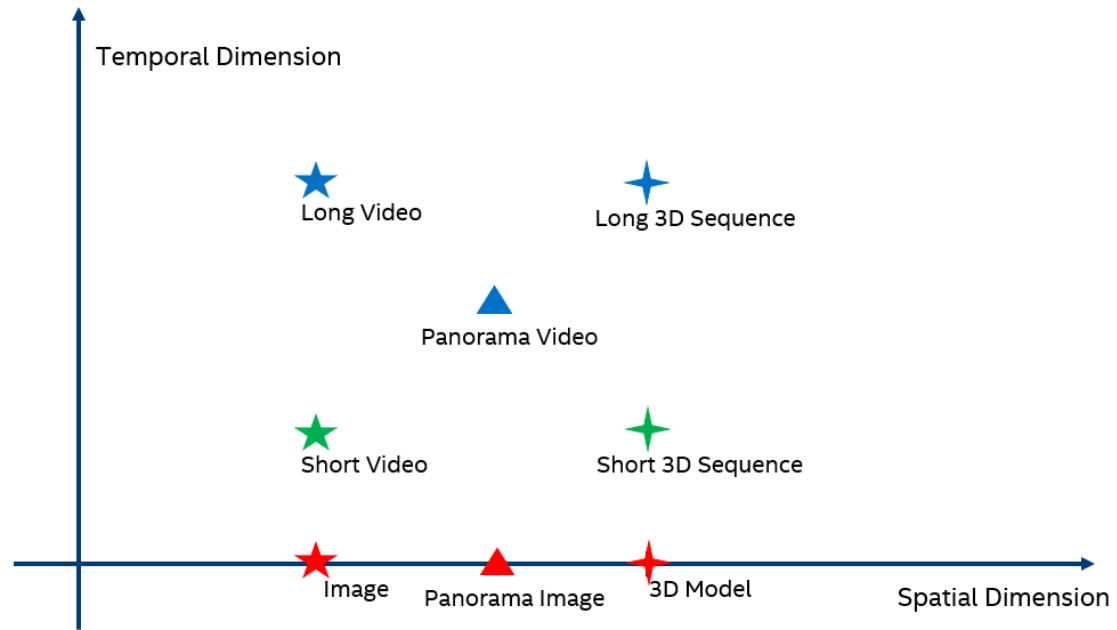
➤ Visual Content



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

Introduction of Visual AI

➤ Visual Content



Visual Content



Image



3D Model



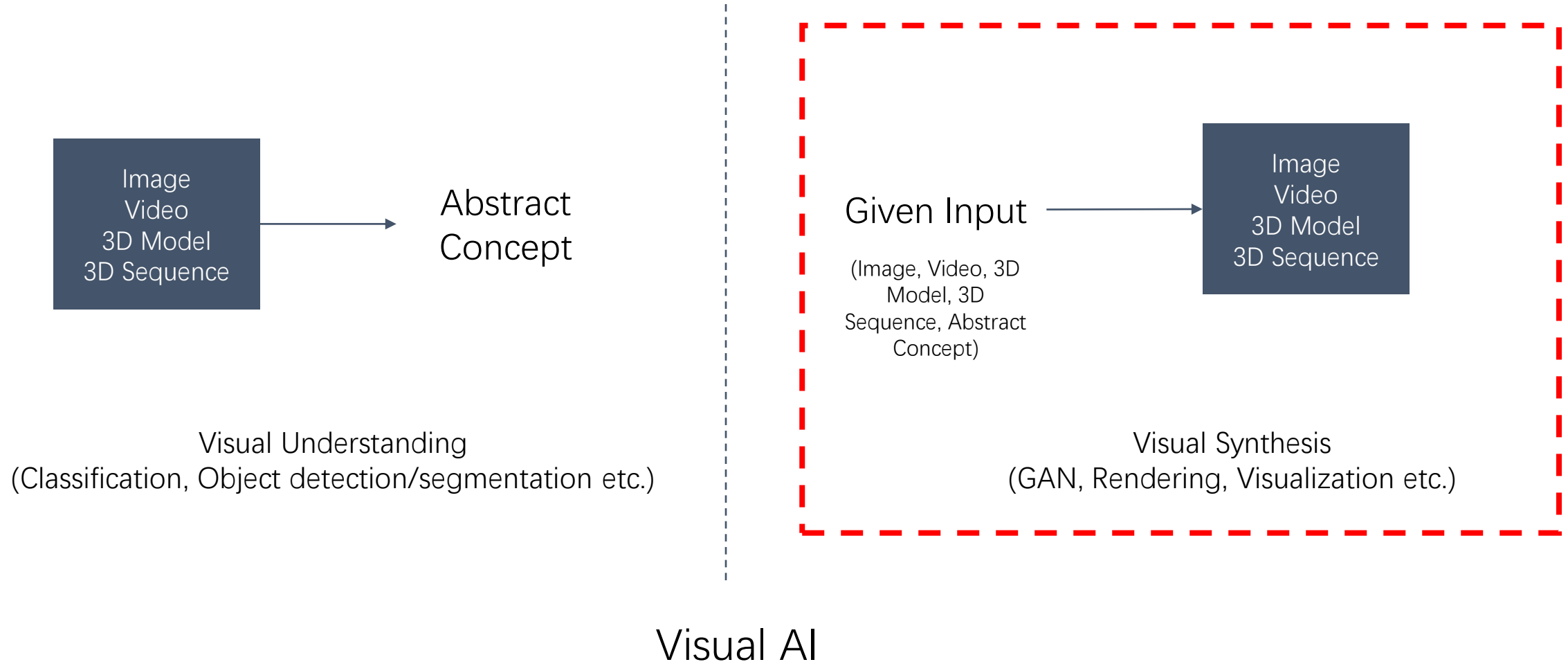
Video



3D Sequence

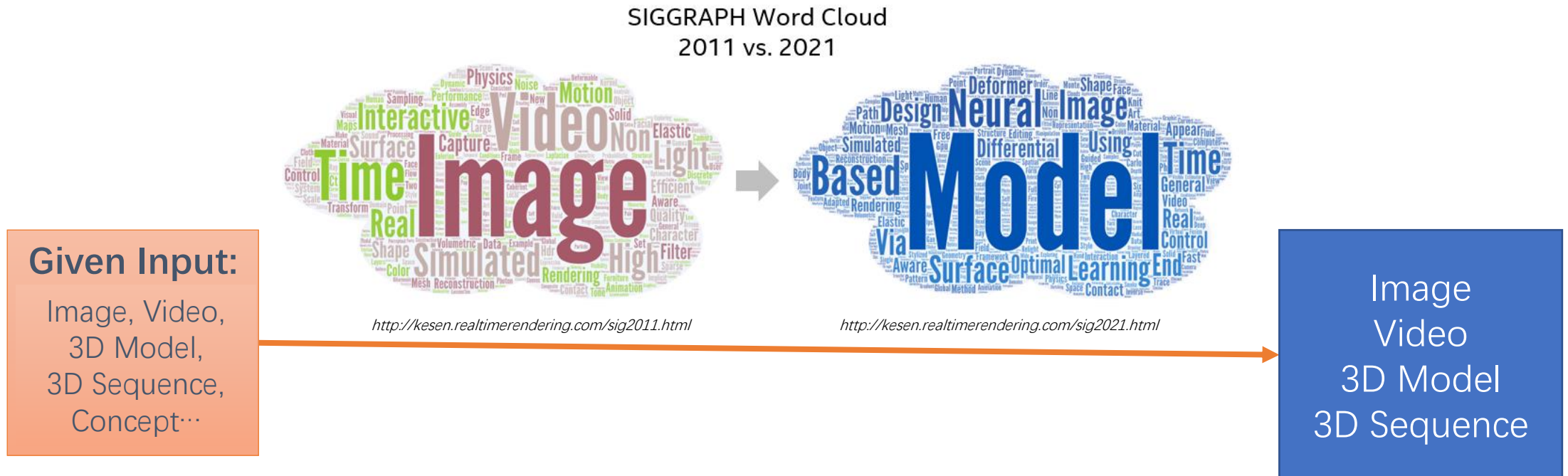
Introduction of Visual AI

- Visual AI (Visual Understanding and Visual Synthesis)



Introduction of Visual AI

- Visual AI (Visual Understanding and Visual Synthesis)

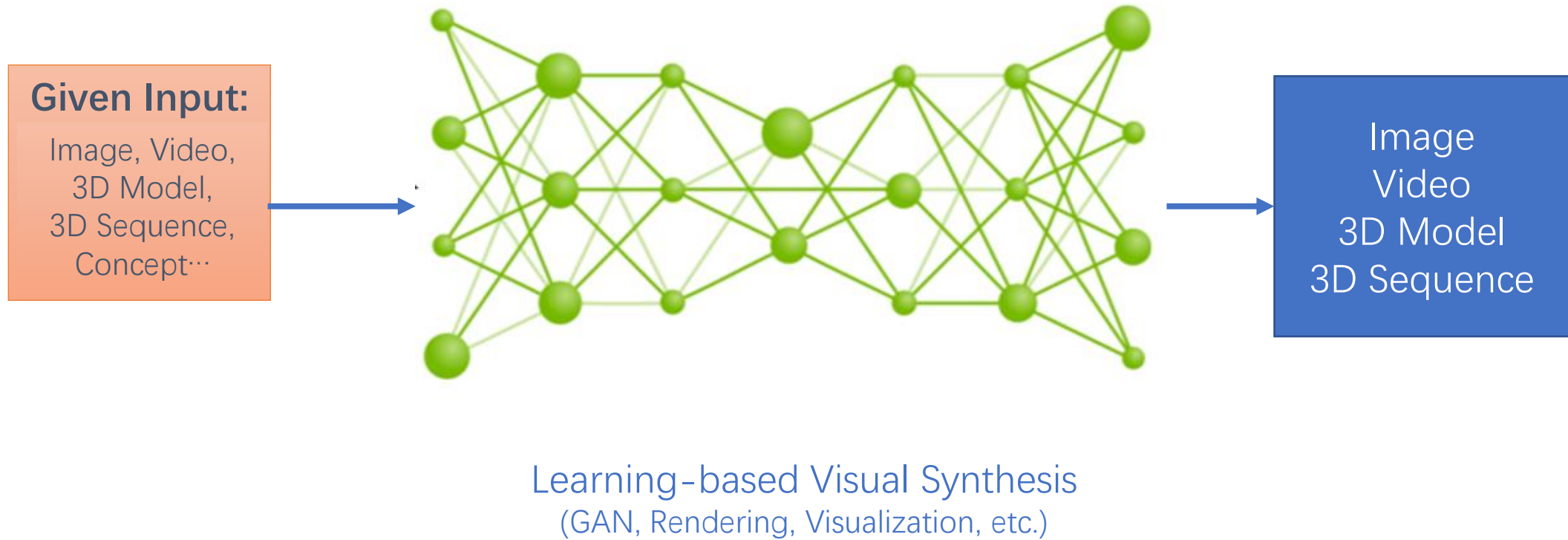


Learning-based Visual Synthesis

(GAN, Rendering, Visualization, etc.)

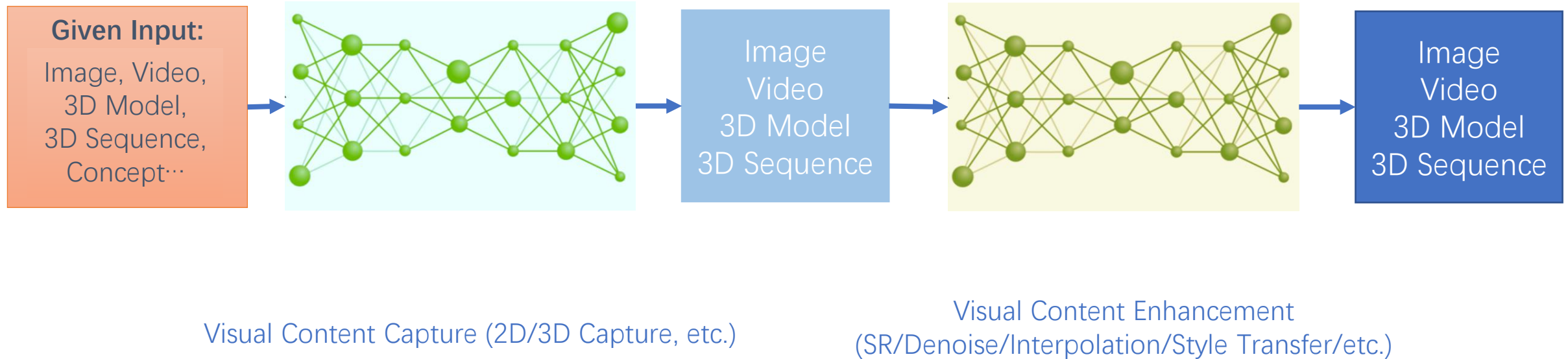
Introduction of Visual AI

➤ Learning-based Visual Synthesis



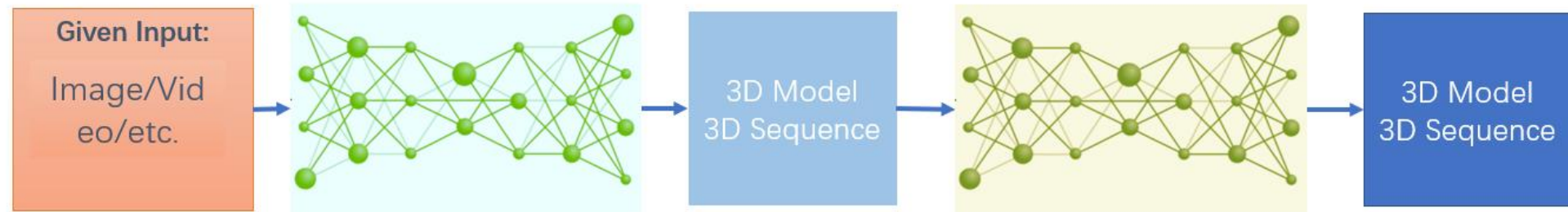
Introduction of Visual AI

➤ Learning-based Visual Synthesis



Introduction of Visual AI

➤ Learning-based Visual Synthesis

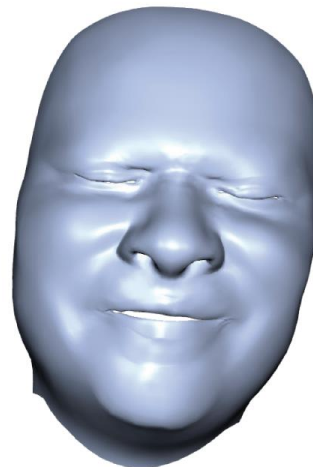


Visual Content Capture (3D Capture, etc.)

Visual Content Enhancement (3D Enhancement, etc.)



Visual Content Capture

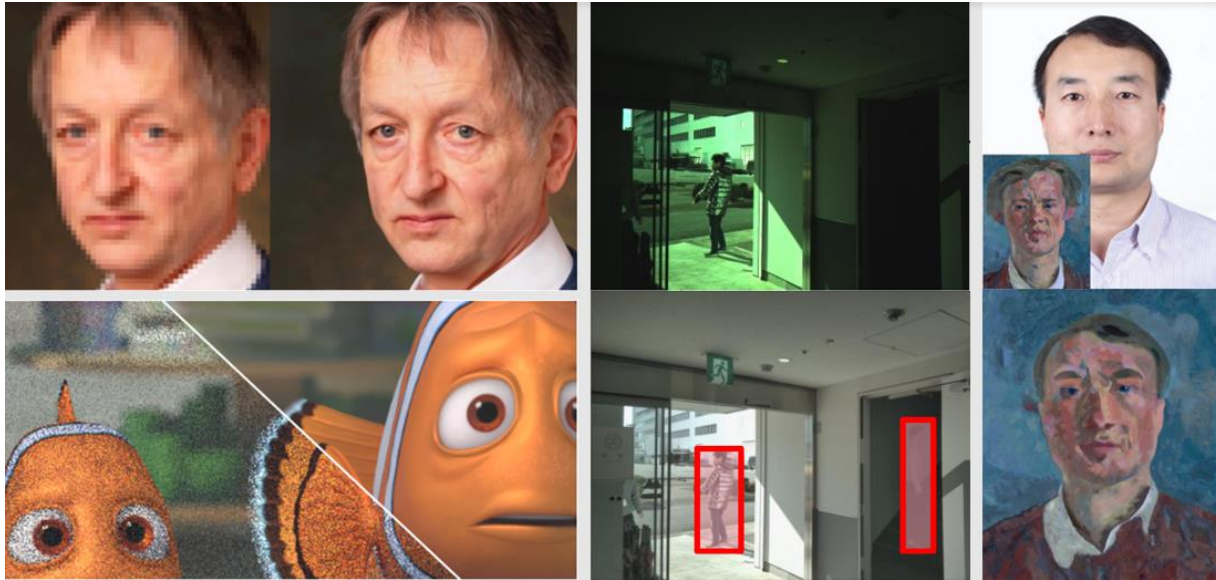


Visual Content Enhancement



Introduction of Learning-based Visual Synthesis

➤ LVS Applications



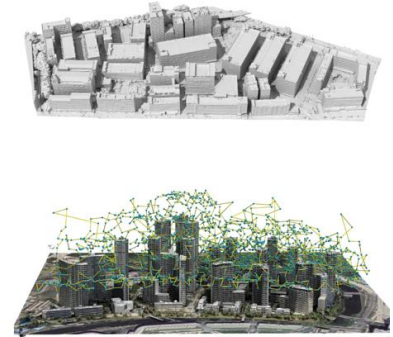
2D Processing
(SR, Deblurring, Denoising, ISP, Style Transfer, etc.)



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



3D Indoor Capture



3D City Capture

3D Modeling
(3D Human/Indoor/City/etc.)