Panoptic Lintention Network: Towards Effcient Navigational Perception for the Visually Impaired

Wei Mao[1,2]   Jiaming Zhang[1]   Kailun Yang[1]   Rainer Stiefelhagen[1]

IAR, Karlsruhe Institute of Technology, Germany
Sino-German School, Tongji University, China

- VerConv models Multi-scale and Channel Interactions

- Lintention learns long-range dependencies in linear time & space

- Panoptic Lintention Net: Fewer Parameters, Fewer FLOPs, Better Performance

- A Wearable Assistive System: Fulfill the navigational perception needs of the visually impaired

(a) Wearable system

(b) Indoor scene

(c) Outdoor scene