An Architecture and Method using MPEG-V Metadata in Smartphone and Sensor Aggregator

Seong Gon Choi*, Mi Ryong Park**,

*College of Electrical & Computer Engineering, Chungbuk National University, South Korea

**Electronics and Telecommunications Research Institute, South Korea

sgchoi@cbnu.ac.kr, mrpark@etri.re.kr,

Abstract—This paper propose a new method generating MPEG-V metadata with interworking between smartphone and sensor aggregator for simplified 4D (4-Dimension) image-making on a smartphone. For this, we made sensor aggregator which detects and collects various sensing factor for 4-dimensional imagification. The sensor aggregator provides the sensing factor information to the smartphone. Then, the smartphone directly makes 4D images by using MPEG-V application (App) based on the sensing information. Consequently, the proposed method can process 4D image-making more simply in comparison to existing method which makes 4D images after 2D or 3D image-making.

Keyword—MPEG-V, metadata, 4D images, Sensor aggregator



Seong Gon Choi was born in Daegu, Korea in 1967. He received B.S. degree in Electronics Engineering from Kyeongbuk National University in 1990, and M.S. and Ph.D degree from Information Communications University, Korea in 1999 and 2004, respectively. He is currently an assistant professor in School of Electrical & Computer Engineering, Chungbuk National University. His research interests include NGN, energy saving network, mobile communication, high-speed network architecture and protocol.



Mi Ryong Park was born in Kyeongbuk, Korea in 1968. He received B.S. degree in Electronics Engineering from Kyeongbuk National University in 1993, and M.S. degree from Information and Communication Engineering from Kyeongbuk National University. He is currently senior researcher in Electronics and Telecommunications Research Institute. His research interests include Ethernet technology, compression codec.