

# Artificial Intelligence & AI Convergence Network Colloquium

## TITLE Large-scale Video Understanding

**When : 2021.12.1.(WED) P.M.4:30~**

**Where : Zoom**

링크 <https://zoom.us/j/98323934412?pwd=TUp2VF11ZUF1K1pzVXdsSGhrV3lhZz09>

회의 ID: 983 2393 4412, 암호 : 3898

**Speaker : Joonseok Lee(Research engineer, Google Research/  
Professor, Seoul National University)**

**Abstract :** The goal of video understanding is to develop algorithms that enable machines to understand videos at the level of human experts. Researchers have tackled various domains including video classification, search, personalized recommendation, and more. However, there is a research gap in combining these domains in one unified learning framework. In this talk, we overview an approach of general-purpose video representation learning, based on audio-visual content and video-to-video relationships. We introduce relevant problems that can take advantage of this approach, including video classification and recommendation. To make this approach more scalable, we also present an improved version of this, with smart triplets created from video relational graphs.

**BIO :** Joonseok Lee is a research engineer at Google Research and assistant professor at Graduate School of Data Science in Seoul National University. He is mainly working on multi-modal video representation learning. He earned his Ph.D. in Computer Science from Georgia Institute of Technology in 2015, under the supervision of Dr. Guy Lebanon and Prof. Hongyuan Zha. His thesis is about local approaches for collaborative filtering, with recommendation systems as the main application. He has done three internships during Ph.D, including Amazon, Microsoft Research, and Google. Before coming to Georgia Tech, he worked in NHN corp. in Korea (2007-2010). He received his B.S degree in computer science and engineering from Seoul National University. He co-organized the YouTube-8M Large-Scale Video Understanding Workshop as a program chair, and served as the publicity chair for AISTATS 2015 conference. More information is available on his website (<http://www.joonseok.net>).

**Contact :** 정보통신대학 소프트웨어학과 조현석 교수  
([hyunsouk@ajou.ac.kr](mailto:hyunsouk@ajou.ac.kr))

☎ 세미나 문의 : 031 - 219 - 3647, 3898



아주대학교

