

# AI기반 3D 컴퓨터비전 연구 세미나: 딥러닝 데이터의 함수화

김현직 연구원



## 일시 및 장소

- 일시: 2022년 2월 14일 (월) 오전 11시
- 장소: 한양대학교 제2공학관 402호  
& 온라인 병행 세미나 ([Zoom](#))



### Abstract

**\*강연은 영어로 진행됩니다**

It is common practice in deep learning to represent data as arrays e.g. a 2D array of pixels. However, the underlying signal represented by these measurements is often continuous, e.g. the scene depicted in an image. A powerful continuous alternative is to represent the data using an implicit neural representation, a neural function trained to output the appropriate measurement value for any input spatial location. In our work, we take this idea to its next level: what would it take to perform deep learning on these functions instead, treating them as data? In this context we refer to the data as functions, and propose a framework for deep learning on functions. We apply our framework to 1. a wide range of data modalities including images, 3D shapes, neural radiance fields (NeRF) and data on manifolds and 2. various tasks including generative modeling, data imputation, novel view synthesis and classification.

[ 연사 약력 ([hyunjik11.github.io](https://hyunjik11.github.io)) ]

- 영국 Google Deepmind 연구원 (2019~현재)
- 영국 University of Oxford 기계학습 박사 (2015~2019)
- 영국 University of Cambridge 수학 학석사 통합과정 (2011~2015)

[ 관련 논문 ]

- E. Dupont and H. Kim et al., From data to functions: Your data point is a function and you should treat it like one, arxiv (under review).

**Contact:** 융합전자공학부 홍제형 교수 ([jhh37@hanyang.ac.kr](mailto:jhh37@hanyang.ac.kr) , 02-2220-2489)



융합전자공학부



한양대학교 BK21 FOUR 융합IT미래인재교육연구단