



復旦大學  
FUDAN UNIVERSITY

Applied Math  
Ph.D. Seminar

## The progress of modern dialogue system: generative, retrieval, task-oriented

**Speaker:** Wei Chen (Fudan University)

**Time:** 2021-11-01, 16:10 to 17:00

**Location:** Rm 1801, Guanghua East Tower

**Advisor:** Zhongyu Wei (Fudan University)

**Abstract:** In this talk, we will introduce our research on generative, retrieval and task-oriented dialogue system respectively. In generative dialogue system, we propose a new dialog pre-training framework called DialogVED, which introduces continuous latent variables into the encoder-decoder pre-training framework to increase the relevance and diversity of responses. We pre-train DialogVED on large-scale dialogue corpus, achieving SOTA results on multiple downstream tasks. In retrieval-based dialogue system, we propose a fine-to-coarse distillation model based on contextual matching for coarse-grained response selection in open-domain conversations. Extensive experimental results on two self-constructed datasets show that the proposed methods achieve a significant improvement over all evaluation metrics compared with traditional baseline methods. In task-oriented dialogue system, we propose a diagnosis-oriented dialogue system framework, and introduce a large-scale medical dialogue corpus DialoIMC with multi-level fine-grained annotations. We establish three evaluation tracks on DialoIMC and report a set of benchmark results for each track, which shows the usability of the dataset and sets a baseline for future studies.