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Area: Signal Analysis & Machine Intelligence

Host: Prof Li Haizhou

Co-organized by
Chinese and Oriental Languages Information Processing Society, Singapore
IEEE Singapore Systems, Man and Cybernetics Chapter

TOPIC	:	**Spoken Content Retrieval**
SPEAKER	:	**Prof. Murat Saraçlar,** **Boğaziçi University,** **Electrical and Electronics Eng. Dept., Istanbul, Turkey**
DATE	:	**20 January 2020, Monday**
TIME	:	**2pm to 3pm**
VENUE	:	**EA-06-05, Engineering Block EA, Faculty of Engineering, NUS**

ABSTRACT

As the amount of available spoken content grows, search and retrieval of speech data is becoming more relevant. Although the recent advances in automatic speech recognition has improved speech retrieval performance, there are still many challenges in the field. In this talk, after a brief history of spoken content retrieval, the main focus will be on keyword search for low-resource languages. Classical and recent methods for mitigating the effects of speech recognition errors as well as dealing with queries that are not in the vocabulary of the speech recognition system will be covered. Novel posteriorgram based approaches, inspired in part by query-by-example search, make use of neural networks for query modelling and distance metric learning and improve the performance of keyword search systems in low-resource settings, especially for out-of-vocabulary queries.

BIOGRAPHY

Murat Saraçlar received his B.S degree in 1994 from the Electrical and Electronics Engineering Department at Bilkent University, M.S.E. degree in 1997 and Ph.D. degree in 2001 from the Electrical and Computer Engineering Department at the Johns Hopkins University. From 2000 to 2005, he was with the multimedia services department at AT&T Labs Research. In 2005, he joined the Boğaziçi University Electrical and Electronic Engineering Department where he is currently a full professor. He was a visiting research scientist at Google Inc, New York (2011-2012) and an academic visitor at IBM T.J. Watson Research Center (2012-2013). Dr. Saraçlar was awarded the AT&T Labs Research Excellence Award in 2002, the Turkish Academy of Sciences Young Scientist (TUBA-GEBIP) Award in 2009, and the IBM Faculty Award in 2010. He has more than 100 publications in journals and conference proceedings. He served as an associate editor for IEEE Signal Processing Letters (2009-2012), IEEE Transactions on Audio, Speech, and Language Processing (2012-2016) and on the editorial board of Language Resources and Evaluation journal (2012-2016). He is currently a member of the editorial board of Computer Speech and Language and a senior area editor for IEEE Transactions on Audio, Speech, and Language Processing. He was a member of the IEEE Signal Processing Society Speech and Language Technical Committee (2007-2009, 2015-2018).