神戸大学大学院科学技術イノベーション研究科　主催

Google 人工知能（AI）セミナー

日時：　2017年7月24日（月）17：00～19：00

場所：　農学部大講義室（C101教室）

講師：　Michael Schuster, Ph.D.　（マイケル・シャスター博士）
　　　Senior Staff Research Scientist, Google Brain Group, Google, Inc.

演題（Title）：　Neural Machine Translation and other AI projects at Google

講演の概要（Abstract）：※　シャスター博士は日本語が堪能でいらっしゃるため、講演自体は主に日本語で行われます。

Machine learning and in particular neural networks have made great advances in the last few years for products that are used by millions of people, most notably in speech recognition, image recognition and most recently in neural machine translation. Neural Machine Translation (NMT) is an end-to-end learning approach for automated translation, with the potential to overcome many of the weaknesses of conventional phrase-based translation systems. This talk presents the move to GNMT, Google's Neural Machine Translation system. On the WMT'14 English-to-French and English-to-German benchmarks, GNMT achieves state-of-the-art results. Using human side-by-side evaluations it reduces translation errors by more than 60% compared to Google's phrase-based production system. The new Google Translate was launched in late 2016 and has improved translation quality significantly for all Google users. I will also explain some other AI projects using similar technology.

講師の経歴（Bio）：

Dr. Mike Schuster graduated in Electric Engineering from the Gerhard-Mercator University in Duisburg, Germany in 1993. After receiving a scholarship he spent a year in Japan to study Japanese in Kyoto and Fiber Optics in the Kikuchi laboratory at Tokyo University. His professional career in machine learning and speech brought him to Advanced Telecommunications Research Laboratories in Kyoto, Nuance in the US and NTT in Japan where he worked on general machine learning and speech recognition research and development after getting his PhD at the Nara Institute of Science and Technology. Dr. Schuster joined the Google speech group in the beginning of 2006, seeing speech products being developed from scratch to toy demos to serving millions of users in many languages over the next eight years, and he was the main developer of the original Japanese and Korean speech recognition models. He is now part of the Google Brain group which focuses on building large-scale neural network and machine learning infrastructure for Google and has been working on infrastructure with the TensorFlow toolkit as well as on research, mostly in the field of speech and translation with various types of recurrent neural networks. In 2016 he led the development of the new Google Neural Machine Translation system, which reduced translation errors by more than 60% compared to the previous system.