Machine Learning for Voice Recognition

Saritha Kinkiri
University of Greenwich
Faculty of Engineering and Science,
University of Greenwich,
Chatham Maritime ME4 4TB, UK
S.Kinkiri@gre.ac.uk

Wim J.C Melis
University of Greenwich
Faculty of Engineering and Science,
University of Greenwich,
Chatham Maritime ME4 4TB, UK
Wim.J.C.Melis@gre.ac.uk

Simeon Keates
University of Greenwich
Faculty of Engineering and Science,
University of Greenwich,
Chatham Maritime ME4 4TB, UK
S.Keates@gre.ac.uk

ABSTRACT

Verbal communication is very important to humans, but performing verbal communication with machines still faces particular challenges. Therefore, researchers are trying to find ways to make communication with a machine more similar to communicating with other people, for which two systems have been identified: speech and voice recognition. While speech recognition has aimed to become speaker independent, voice recognition focuses on identifying the speaker, by looking at the tone of the voice, which is affected by the physical characteristics of that person. This requires one to identify these unique tonal features, to then train a system with this data. Being able to perform this identification well, would also bring benefit to speech recognition by allowing the system to adjust to the characteristics of that speaker and how he/she produces their sounds.