Automatic Speech Recognition Training Software for Joint Terminal Attack Controller Close Air Support Requests

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Abstract

Close air support (CAS) is a crucial element of joint fire support that requires intricate planning, coordination, and training of various ground and supporting air forces for safe and effective execution. Based on the nature of the target and the availability of additional fire support, synchronizing CAS in time, space, and purpose with supported ground forces is one of the most detailed and continuous integration tasks performed in concert by the joint force, component commanders, and staffs (Joint Publication, 2014). Using SpeechZero, a novel interface that allows non-expert users to customize Automated Speech Recognition (ASR) systems for Department of Defense training applications, SoarTech is creating a training software for Joint Terminal Attack Controller (JTAC) CAS requests. These requests follow a structured verbal protocol called a 9-line. The training software utilizes ASR and generation, which allows trainees to practice verbal communication skills in representative training environments without the need for human role players. However, these technologies have yet to become a feature of most training systems. Using SoarTech's SpeechZero ASR software, an individual speaks their 9-line request into a tablet or smartphone which will parse the speech and use AI algorithms to categorize it within the 9-line framework. The utilization of this software for CAS 9-line requests has the potential to produce more effective training and documentation of CAS events which is critical in ensuring the safety of civilians and friendly forces alike.

References

Joint Publication (JP) 3-09.3. Close Air Support, 25 November 2014.