

# 先端科学技術研究科 修士論文要旨

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論文題目	A Data Collection Protocol, Tool, and Analysis of Multimodal Data at Different Speech Voice Levels for Avatar Facial Animation		
要旨			
<p>Knowing the relationship between speech-related facial movement and speech is essential for avatar animation. Accurate facial displays are necessary to convey perceptual speech characteristics fully. Recently, an effort has been made to infer the relationship between facial movement and speech with data-driven methodologies using knowledge of computer vision, computer graphics, and psychology. Even though a variety of audio-visual datasets are available, creating a multi-modal dataset is laborious and prevents researchers from interdisciplinary studies. To this aim, we propose a protocol for audio-visual and behavioral data collection and a tool running on WEB that aids in collecting and synchronizing data. Furthermore, using this methodology, we found a relationship between speech volume and facial movement around the nose, cheek, mouth, and head pitch. This protocol, WEB-based tool, and findings will be helpful for other scientists to derive models for avatar animation.</p>			