

## EVALUATION OF EMOTION ESTIMATION METHODS BASED ON STATISTIC FEATURES OF EMOTION TAGGED CORPUS

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**ABSTRACT.** *Development of information technology has been increasing the chance of interaction between human and computer. Computer used to be a tool and its development had been mainly emphasized on the speed of information processing. However, by understanding not only semantic information but also ambiguous information such as emotion, computer can be a versatile partner for human that can detect emotional state of a person and can response appropriately the emotion. As a primary study of text-based emotion estimation by computer we focused on statistically analyzing the relationship between word emotion and sentence emotion based on the originally created emotion tagged corpus then propose two emotion estimation methods according to the obtained statistic features. The proposed methods are evaluated using a prototype system.*

**Keywords:** Corpus analysis, Affective computing, Statistic analysis

1. **Introduction.** The development of information technology has made computer intervene everywhere in our daily life. On the other hand, computer is expected to be in charge of more versatile and complex processing. In particular, computer is more becoming required abilities to deal with ambiguous judgment or react appropriately according to the user's feeling. Therefore, a technique to understand profound level of information such as intention or emotion of a speaker is becoming important.

Affective computing is an area of research focusing on ambiguous information such as sensibility or emotion inherited to human and pursues to realize communication between human and computer without unease. Our research group has been engaged in affective computing from various aspects of voice sound, image processing, brainwave or text-base analysis [13][11].