

## Advanced Affective Computing

2 units (selection)

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**Target** To understand novel theories and algorithms of affective computing research fields, such as emotion information processing and emotion recognition.

**Outline** First, concepts of affective computing and emotion are introduced, and basic theories and algorithms using emotion recognition and other affective computing research fields are lectured. After that, we study a detail of emotion recognition methods from various media, which is text, speech, and facial expression. Finally, emotion creating methods and expressing methods for robots are lectured.

**Keyword** *affective information, emotion recognition, emotion calculation, language understanding, emotion creating, emotion expressing*

**Fundamental Lecture** “**Artificial Intelligence 1**”(1.0), “**自然言語処理**”(1.0)

**Relational Lecture** “**Advanced Machine Translation**”(0.5)

**Goal** Understanding novel theories and algorithms of affective computing research fields, such as emotion information processing and emotion recognition.

### Schedule

1. Introduction of affective computing
2. Affective computing and emotion
3. Modeling method of emotion
4. Measuring method of emotion
5. Emotion in linguistic expression
6. Emotional corpus
7. Emotion recognition from text
8. Emotion in sound
9. Emotion recognition from speech
10. Emotion in still image and movie
11. Emotion recognition from facial expression
12. Emotion recognition from multi-modal
13. Emotion creating method for robot
14. Applications of affective computing
15. Affective communication between human and robot
16. Conclusion

**Evaluation Criteria** Evaluation is carried out by report.

**Textbook** なし

**Reference** なし

**Contents** <http://cms.db.tokushima-u.ac.jp/cgi-bin/toURL?EID=216601>

**Student** Doctoral Course Students of Graduate School of Advanced Technology and Science

### Contact

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