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E-mail: {kuai, shidochi, ttakahashi, ide, murase}@murase.m.is.nagoya-u.ac.jp

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Analysis of Cooking Motions in Cooking Video

KUAI Cheng Ying Yuka SHIDOCHI Tomokazu TAKAHASHI Ichiro IDE *

and Hiroshi MURASE

Graduate School of Information Science, Nagoya University

1 Furo-cho, Chikusa-ku, Nagoya-shi, Aichi, 464-8601 Japan

Faculty of Economics and Information, Gifu Shotoku Gakuen University

1-38 Nakauzura, Gifu-shi, Gifu, 500-8288 Japan

National Institute of Informatics 2-1-2 Hitotsubashi, Chiyoda-ku, Tokyo, 101-8430 Japan

E-mail: {kuai, shidochi, ttakahashi, ide, murase}@murase.m.is.nagoya-u.ac.jp

Abstract Recently, the demand of new cooking support service, such as digital cook textbooks, is rising. We considers to provide people with visual explanations for cooking support services, and therefore aim at building a video database of cooking motions by extracting cooking operations from cooking shows. In a cooking video, there are hundreds of cooking operations, most of which are repetition of basic motions, such as cutting, frying and mixing. In this presentation, we try to detect such repetitious motions, and also identify them by their features.

Keyword Cooking Video, Cooking Motion, Motion Detection, Motion Feature

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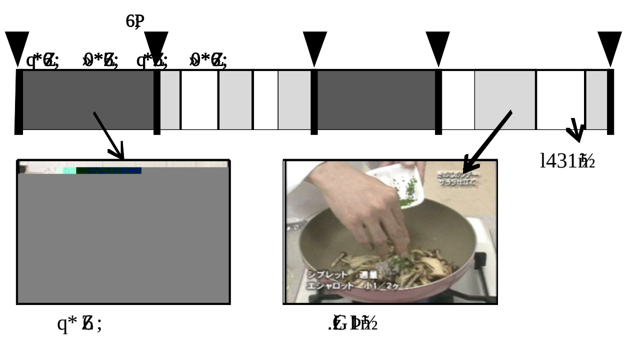

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16×16

FFT

29 FFT 4

P

$n \times N$ f_p

f_p F_{peak}

f_p R_{sharp}

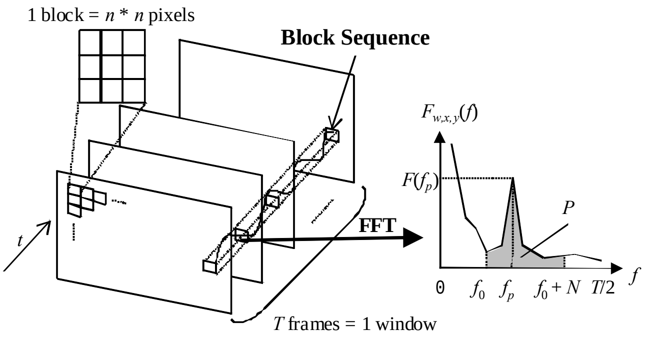
2

f_0

$f < f_0 + N$ 29

[7]

2



FFT

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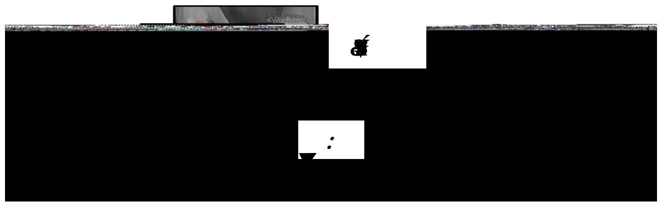

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5.1. 実験条件

NHK

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FFT T 32

16

0.5 $f_0 = 39$ $N = 12$

2

-+ 2:

P	500
f_p	3
F_{peak}	10
R_{sharp}	3

5.2. 実験結果

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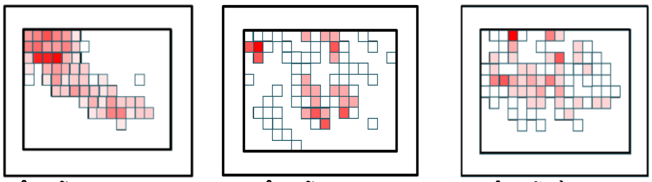

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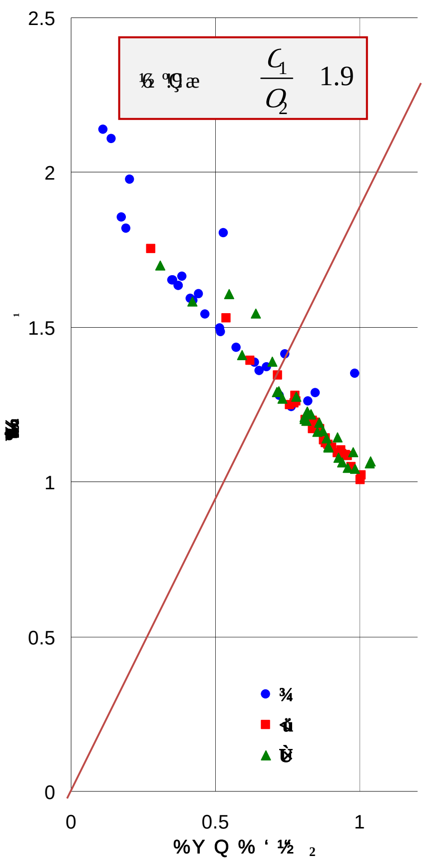

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