

Title	画像への感性情報記録手法の提案とその評価
Author(s)	石橋, 賢
Citation	
Issue Date	2011-03
Type	Thesis or Dissertation
Text version	author
URL	http://hdl.handle.net/10119/9688
Rights	
Description	Supervisor:宮田一乗, 知識科学研究科, 修士

Proposal and Evaluation of Methods for Embedding “Kansei” Information into Images

Ken Ishibashi

School of Knowledge Science,
Japan Advanced Institute of Science and Technology
March 2011

Keywords: kansei information, computational photography, kansei engineering, embedding emotion, 2D map, painting-like image

Computational Photography (CP) combines plentiful computing and several sensors, enables novel imaging applications and simplifies many computer vision tasks. Its ultimate goal is to encode the human experience in a single captured photograph. However, no previous research regarding the method for the ultimate goal has been unreported. In this research, I try to approach the ultimate goal of CP through the perspective of Kansei engineering, whose features are capable of adapting to various research areas, because Kansei information is related to the human experience. The aim of this research is to embed Kansei information into images to clarify Kansei information and open up novel areas of research.

In this research, there are three proposals and their evaluations: **Embedding method of emotion**, **Input method of Kansei**, and **Expression method of Kansei**. The first proposed method gives someone the impression of a specific emotion by using color effects to convey our emotions in photographs. Its evaluation result confirmed that color information allows changing our expression through photographs. The next proposed method allows the user to input our Kansei information easily using 2D map. Questionnaire results confirmed that a 2D map is effective for the input and visualization of Kansei information easily. The final proposed method converts realistic photographs into graphic designs, using filtering and color conversion selected by specifying an abstract word. Its impression evaluation confirmed that the proposed method allows generating painting-like images with Kansei information.