博士学位論文 審査結果の要旨

芝浦工業大学大学院 理工学研究科 博士(後期)課程博士学位論文審査委員会

主	査	大倉	典子		
審査	委員	木村	昌臣		
審査	委員	上岡	英史		
審査	委員	堀江	亮太		
審査委員		加藤	俊一		
*審査委員					

氏 名	Tipporn Laohakangvalvit			
論文題目	A Study of Model of Kawaii Feelings for Evaluation of Products			

[論文審査の要旨]

論文の概要は以下の通りである。

Kansei engineering, which is a consumer-oriented methodology, has been recognized as an important part in a broad range of Japanese manufacturing. Kansei values have been proposed as a new characteristic of industrial products after function, credibility, and cost, which motivate consumer purchases. According to worldwide success of many kawaii products, kawaii is considered as one important kansei value for future product design and development. Therefore, this dissertation focused on a study of kawaii feelings and evaluation of products.

First, she experimentally evaluated the kawaiiness of illustrations using eye tracking. As the results, she clarified the relationship between kawaii feelings and eye movement indexes, and identified two new indexes, which confirmed the effectiveness of eye tracking to evaluate kawaii feelings.

Next, she constructed two new models of kawaii feelings. She performed feature extraction and then constructed models for spoon designs using SVM algorithm. Then, she constructed models for cosmetic bottles using Deep CNN algorithm because their attributes were too complexed to perform feature extraction.

Finally, she clarified effective attributes to design kawaii products by employing constructed models and identified eye movement indexes. She developed a new method to evaluate candidates of effective attributes using Deep CNN model, and clarified effective attributes to increase kawaiiness of products by two eye movement indexes.

本研究の成果は、学会誌査読論文(日本感性工学会)1 件、国際会議(IEA2018、AHFE2017 等)10件、SEATUCの workshopでの発表 2 件、国内研究会・大会(日本感性工学会等)3 件である.

審査においては、予備審査での指摘事項は全て修正されており、本研究は博士(工学)を授与するのに充分値するものと判断され、全員一致で「合格」と決定された。ただし、指摘事項に正確に応えようとするあまり、主張が少し弱くなってしまった点については、最終稿でより主張が明確になるよう修正するものとした。