

List of Dissertation Abstract (Information Media and Environment Sciences)

Name	Supervisor	Title	Abstract
Yasushi IWATA	Tsutomu MATSUMOTO	A Study of Instrumentation Security Evaluation System for Stereo Cameras	Systems using stereo cameras cover a wide variety of fields, such as the automotive field and the drone field. Many of these systems are related to human life or have a large financial loss if they cannot operate, and it can be said that improving their security is social. In this paper, we constructed a system to evaluate the measurement security for stereo cameras as a part of the foundation for correctly and uniformly evaluating the measurement security. We attacked a commercially available stereo camera, checked the sensor output, and evaluated the security based on the results.

Kazuki WATANABE	Junji SHIKATA	Public-key Encryption with Keyword Search Using Hidden Vector Encryption	Normally, encrypted data cannot be retrieved without being decrypted once. Searchable encryption is an encryption technology that allows a search while encrypting data. Among various types of searchable encryption, research has focused on searchable encryption using hidden vector encryption, and defines a new security that has not been proposed in previous research, such as "no information about keywords is leaked from trapdoors to eavesdroppers on the communication path."
Geihi HITSU	Tomoharu NAGAO	Analysis of relationship of multiple people based on motion recognition	With the development of computer vision, action recognition has been applied widely. Since actions are recognized as an expression of sensitivity, many researchers focus on action recognition research to study how sensitivities work. In this paper, we focus on the human action recognition with supervised learning in the conference scenes. We use convolutional neural network to predict the actions and analyze the results so that we can obtain the relationship between

Rong MA	Katsunori OKAJIMA	Effects of modulated facial expression feedback on taste perception	sour/bitter expression feedback crossmodally effects sour/bitter taste perception by using the facial expression modulating system. By using this system, the happy and sad expression also have effects on sweet and bitter taste perception
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