**English IIIB (FMS) Poster Session Abstract Template**

Instructor: Anzai

Class Hour: 3rd period

Group ( 4 )

**The Experiment of Dummy Cursor on Smartphone**

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【Abstract】

Through Multiple Dummy Cursors experiment, it is clear that the users can easily identify a self-controlled cursor and people who is trying to identify the user-controlled cursor experienced difficulty identifying the user-controlled cursor from the dummy cursors. Dummy cursor is useful for security, such as preventing peeping PIN on PC. Today, we often use smartphones anywhere. In this experiment, we researched whether the same phenomenon of Multiple Dummy Cursors experiment can be confirmed on smartphones. we made a dedicated app by using Unity and investigate whether users and observers could identify the actual user-controlled cursor. As a result, many users were able to find it earlier than observers. The average of users find time was about 8.45 seconds and the median was about 8.64 seconds. This result suggests that the same phenomenon as the original experiment may be occurring on smartphone. In addition, it can be evaluated that the mouse and the screen have a common property in the operation of the cursor. Therefore, it can be predicted that dummy cursors on smartphones can be used for preventing peeping PIN. In this experiment, we only researched the effectiveness of the dummy cursors on smartphones, so it is necessary to research whether it can be used for security in additional experiments.

【References】

KeitaWatanabe, Fumito Higuchi, Masahiko Inami, Takeo Igarashi (2013). Identification of Own Cursor from Multiple Dummy Cursors. IPSJ Interaction 2013. pp.25-31.