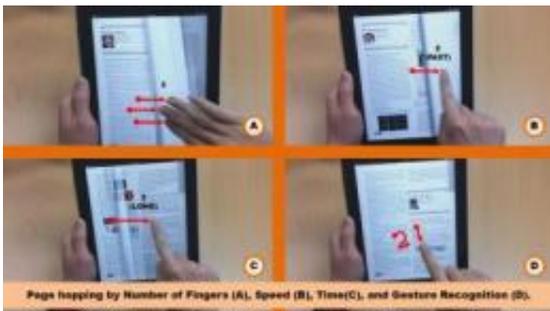


New smart e-book system more convenient than paper-based books

January 10 2012



The new technology allows turning over pages by fingers and speed, time, and gesture recognition. Credit: KAIST

Korea Advanced Institute of Science and Technology (KAIST) announced today that its research team headed by Professor Howon Lee from the IT Convergence Research Institute has developed a technology that will make reading on smartphones and tablet PCs easier than now.

The [technology](#), called the "Smart E-book System," allows users of smartphones and tablet PCs to effortlessly flip through the pages of an e-book or cross-reference its contents, just as they would with paper-based books and magazines.

Unlike conventional displays and user interface technologies, where users' finger movements are locked within the screen of display, the Smart E-book System recognizes finger touches made beyond the

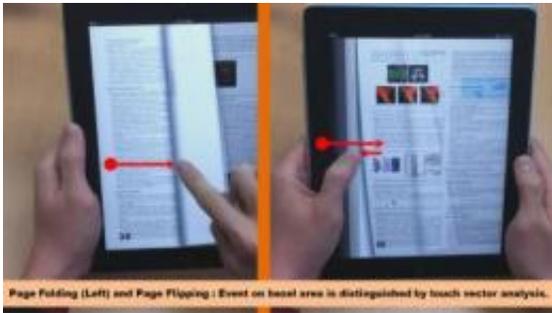
screen.



Finger bookmarking enables readers to remember and quickly return to pages of interest. Credit: KAIST

In other words, this algorithm-based conversion technology detects "touch and entry events" on the bezel ([circumference](#)) of smartphones and tablet PCs and connects them with the "events" occurring within the screen, thereby preserving compatibility with traditional e-book interfaces while providing users with new functions. Therefore, users can readily flip the pages of an e-book from the start-up screen without entering any function keys or touching the screen.

Skimming through the pages of a book, a feature that was previously unavailable with e-books, is also possible through 3D rendering of the contents on the pages being flipped. A bookmark function allows users to conveniently go back and forth between pages of interest. In addition, the system has a "multi-touch" function as well as a smart capability of recognizing dragging time, finger pressure, and finger gestures.



The new technology allows for page folding and flipping. Credit: KAIST

Professor Howon Lee said, "I hope that our technology will accelerate the wider use of [e-books](#) and contribute to Korea's endeavors to lead the development of [software application](#) technology for mobile devices."

Professor Lee and his research team have filed 11 patents for the Smart E-book System in Korea and abroad.

Provided by The Korea Advanced Institute of Science and Technology

Citation: New smart e-book system more convenient than paper-based books (2012, January 10) retrieved 21 September 2024 from

<https://phys.org/news/2012-01-smart-e-book-convenient-paper-based.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.