

# New keyboard software makes typing faster on touch screens (w/ Video)

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LiquidKeyboard developer Christian Sax. Photo Anna Zhu

(PhysOrg.com) -- Researchers in Australia have invented a virtual keyboard they say will make typing on touch screen devices such as the iPad much faster. The software senses the positions of the user's fingertips and as soon as four fingers touch the screen it displays a QWERTY keyboard underneath the fingers, with half the keyboard under each hand. The keys respond to touch, and can be moved around the screen or pressed to type.

Computer systems researcher Christian Sax and colleague Hannes Lau of the University of Technology, Sydney (UTS) developed their prototype, the LiquidKeyboard (patent pending), in order to try to take the traditional [keyboard](#) and adapt it to the new communication interface of the touch screen. It is intended for use with a pressure-sensitive screen, but since touch screens in iPads and similar devices are not yet sensitive to pressure, the software detects pressure by looking at hand size and the position of the fingers and measuring the surface areas of the fingertips.

Sax and Lau are hoping their LiquidKeyboard could eventually be integrated into the operating system of a touch screen device such as the [iPad](#), or it could be made available as an application for sale in an App store. Mr Sax said they thought such a device was necessary because typing on a touch screen is currently difficult and tedious, resulting in hand fatigue. He said their device allows the user to use both hands, and this eliminates the necessity for additional hardware to be purchased.

Mr Sax said they chose the iPad first because the platform is "a bit more powerful and has a more sensitive multi-touch capability," and because the hardware is cheap. They chose the system as their first step even though Google Android tends to be more straightforward, and they had to create a developer account for Apple and obtain the necessary permits and certification for the iPad.

The team say they are definitely aiming to extend the system to Android and as many other touch screen platforms as they can find in the future, and Mr Sax said the system's versatility and low cost would make it an effective system for entering text in a wide range of [touch screen](#) applications.

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