



Whirlscape, Inc.

ABOUT THE MINUUM PROJECT

The Minuum project is an initiative aimed at improving mobile typing—wherever it occurs. The simplified keyboard at the core of the project, in its various forms (touchscreen, motion-based, wearable) presents a solution to the many challenges of mobile typing. Minuum eliminates the visual and physical clutter of conventional mobile keyboards by adapting the keyboard to a single dimension. What enables this minimalism is a specialized auto-correction algorithm that allows highly imprecise typing. Reducing the keyboard to a single dimension opens up a variety of other interaction possibilities, which allows precision-entry.

Benefits of this approach include:

- Significantly more screen space for user content on touchscreen devices
- Accurate, fast, sloppy typing assisted by smart auto-correction
- Precision entry for people with big or clumsy fingers

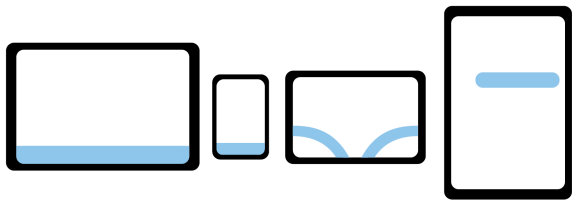
Minuum is currently being developed in English-only configurations, but is extensible beyond the 26 characters of the English alphabet. It can accommodate any language based on the Latin alphabet, plus punctuation, numbering, symbols, emoticons, or other inputs.

Minuum works in the most popular ecosystem that currently admits alternative keyboards, Google's Android (Android Gingerbread, version 2.3 or higher). Minuum is adaptable to touchscreen devices using other operating systems (for example, Windows Mobile, BlackBerry) via license to original equipment manufacturers (OEMs). Since Apple's restrictions on iOS do not allow users to replace the default keyboard, the Minuum project enables iOS app developers to incorporate Minuum as the native virtual keyboard in their software.

Extensibility

The Minuum project, by Whirlscape, is about much more than just touchscreen typing. While the first implementation of this technology is for smartphones and tablets, its type-anywhere implications are far-reaching:

- Wearable computing—breaking the small-form-factor barrier to enable typing with any imaginable smartphone form factor, such as a ring (for example, ringbow.com), watch (for example, getpebble.com), armband, or eye-tracking (for example, with [Google Project Glass](#))
- Home entertainment systems—typing with game controllers or remote controls
- Presentation delivery—typing during presentations with nothing more than a pointer

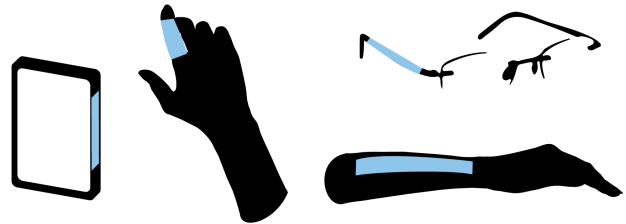


Touchscreens

small, curved, movable

Touch

on fabric, on a surface, on an edge

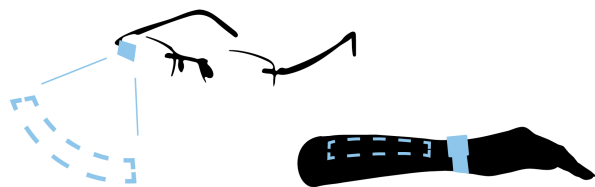
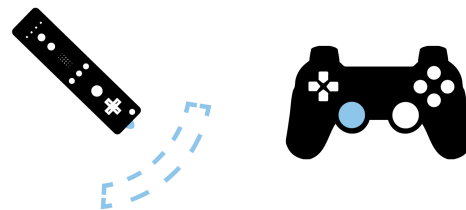


Motion

accelerometer/gyroscope

Game controllers

analog sticks, motion sensors



Camera-based

gestures seen by glasses, watch