Bubble Keyboard: A Gesture-Based Text Entry Method Designed for Minimalized Motion and Increased Speed

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**Abstract**

**Introduction**

**An Overview of Bubble Keyboard**

**Related Work**

**The Design and Engineering**

This section explains in more detail the design and implementation of Bubble Keyboard. Due to the repetitive nature of the Bubble Keyboard, an explanation of the structure is insightful to its successes.

***The Positioning of the Letters***

The letters in Bubble Keyboard are positioned in a manner that optimizes time required to find letters and minimalizing motion. The placement of letters in two rings allows users to select letters from either ring and reduces search time for letters as more likely letters are placed in the inner ring and all possible letters are in the outer ring. In the case of letters that occur in both rings, either one may be selected. Collected data shows that users prefer to select the letter from the inner ring [INSERT RESEARCH].

The inner ring is the collection of the eight most likely letters as predicted by the previous two words typed and the set of letters currently typed as part of the current word. The prediction of the most likely letters for the inner ring for the first letter of the word is based on trigram prediction[Citation]. Using the set of words most likely to follow the previous two words typed, we calculate the most likely initial letter for the word. If there are not eight words received from the trigram, we place the rest of the letters

**An Evaluation of Bubble Keyboard**

**Future Work**

**Conclusions**

**Acknowledgments**