

CTHCI Lab 4

Writing a Review

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<http://hci.rwth-aachen.de/cthci>



A0 I Reflection

- Paper classification: generally great!
- Improve precision and specificity of used words
 - “~~User performance~~”, “~~a method~~”, “~~a study~~”, “explore”
 - “Typing speed”, “**Gestural** keyboard”, “Comparing **A to B**”, “Survey **160** blind people in ...”
- Acquire papers that are important for the main contribution of the target paper



Contribution and Benefits Statements

Context type: Using Hand Posture Information to improve mobile touchscreen text entry

“It is based on detecting the hand posture of the user. It tries to improve the devices and the experience of the users using them. The result of Context type showed that it has no effect on speed typing but it makes a significant improvement on total error rate.”

- Is this a good summarisation?



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- In the contribution statement context is key
- References should be clear
- Do not use undefined terms or acronyms
- Only report the key benefits with precision



Describes the design and evaluation of a high performance soft keyboard for mobile devices by comparing it to QWERTY keyboard layout.

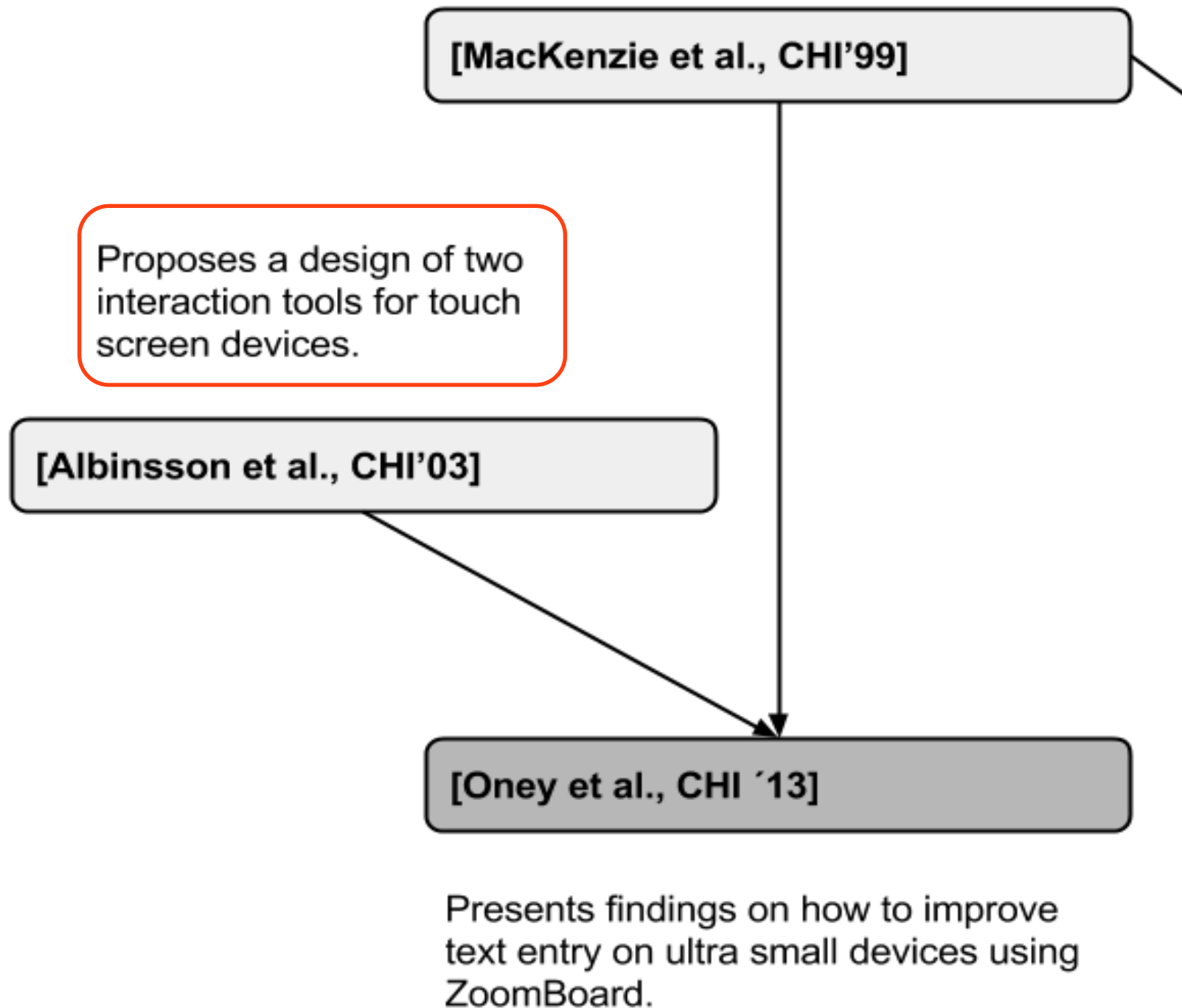
[MacKenzie et al., CHI'99]

Proposes a design of two interaction tools for touch screen devices.

[Albinsson et al., CHI'03]

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Presents findings on how to improve text entry on ultra small devices using ZoomBoard.



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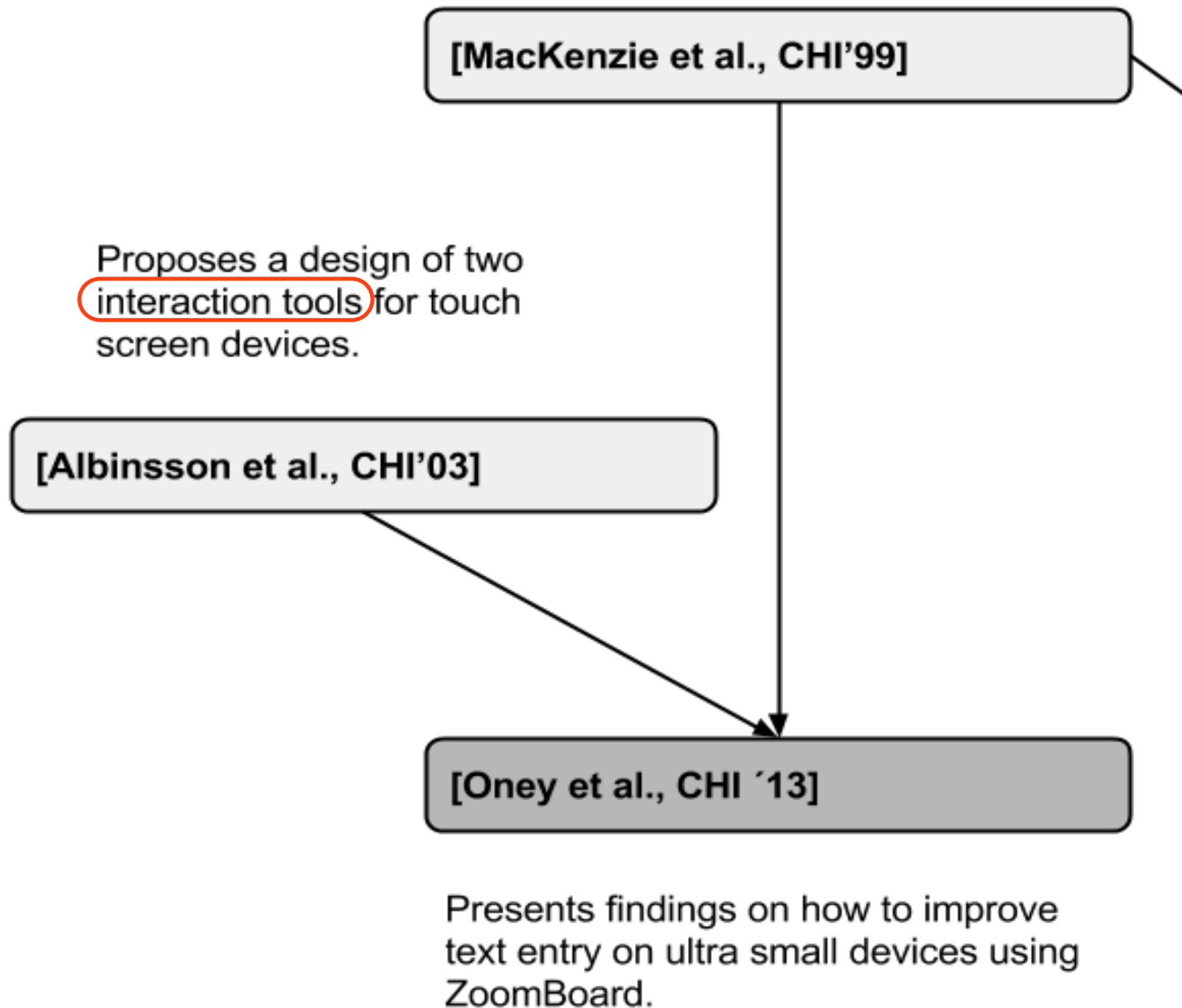
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A panel which focus on the problem that improving user interface for the 'standard user' may worsen them for the handicapped

Buxton, SIGCHI '86

Compare methods and efficiency on touch interface use between blind and sighted people

Shaun K. Kane, CHI '11

Compare methods and error rates when using voice command as text-entry between blind and sighted people

Shiri Azenkot, ASSETS '13

A panel which focus on the problem that improving

Several eyes-free text entry methods were proposed and evaluated with sighted people (*e.g.*, [30]), but they may not be appropriate for blind users. As Kane *et al.* found [14], blind people have different preferences and performance abilities with touch screen gestures than sighted people.

Compare methods and efficiency on touch interface use between blind and sighted people

Shaun K. Kane, CHI '11

Compare methods and error rates when using voice command as text-entry between blind and sighted people

Shiri Azenkot, ASSETS '13

Connection?

Criteria for a Good Paper

- **Contribution:** What new insight does it bring to the field?
- **Benefits:** What can one learn from this / do with this?
- **Novelty:** Prior publications?
- **Validity:** Are the claims properly backed up?
- **Applicability:** How good does the paper match the likely audience?
- **Format:** Readability and clarity



Structure of a Review

- Overall rating: 1: definite reject – 5: definite accept
- Short summary of the contributions and benefits
 - “This paper presents... (who) will benefit from (what)”
- Concerns
 - Originality
 - Validity
 - Clarity
- Suggestions for improvement
- Reviewer’s expertise: 1: no knowledge – 4 expert



Reviewing Checklist

- Recommending **accept**
 - Convince yourself that it has **no serious defects**
 - Convince the editor that it is of an acceptable standard, by explaining why it is **original, valid, and clear**
 - List the changes that should be made before it appears in print
 - Where possible: indicating not just *what to change* but *what to change it to*
 - Take reasonable care in checking details, e.g, mathematics, formulas, and bibliography
- Recommending **reject**
 - **Clearly explain the faults** and, where possible, discuss how they could be rectified
 - Indicate which parts of the work are of **value** and which should be **discarded**
 - Check the paper to a reasonable level of detail

From *Writing for Computer Science* (Zobel, 2004)



Reviewing Checklist

- Always do the following in either case
 - Provide good **references** with which the authors should be familiar
 - Ask yourself whether your comments are **fair, specific, and polite**
 - Be honest about **your limitations** as a referee of that paper
 - **Check your review** carefully as you would check one of your own paper prior to submission

From *Writing for Computer Science* (Zobel, 2004)



In-Class Practice

Writing a review of an evaluation section

Guided review: Quasi-Qwerty Soft Keyboard Optimization (Bi et al., CHI 2010)

High-level understanding: Summarizing your understanding about the contribution and benefits of the paper. The final summary is usually put into 3-4 sentences in the actual review.

A. Problem
Between the two keyboard layouts (____ and ____),
there is a trade-off between ____ and ____.

B. Method
This paper proposed ____ that ____

This paper argue that ____

To support this argument, regarding the motor performance, the authors derived theoretical movement efficiency of five keyboard layouts.
A(n) ____ comparing ____ and ____
____ in three conditions: ____, ____, and ____.

C. Results
Both theoretical motor performance and initial visual search time from the experiment reveals that ____ provide a balance between ____ and ____.

D. Implications
The results of this paper can lead to a future keyboard layout design that strikes a balance between the motor performance and visual search time.

Writing a review for Evaluation sections: This part of the review focuses on the validity, generalizability, and replicability of the methods used in the evaluation.

B1. Research method:

B2. Variables: What are they? Operational definition?

Were the definitions described unambiguously? If no, what are other interpretations?

How much does the definitions serves the purpose to answer the research question?

B3. Procedure: Was the procedure described in detail such that you can replicate this experiment? What are still ambiguous?

B4. Validity: How much does the study achieved internal and external validity? What are potential threats to the validity?

Quasi-Qwerty Soft Keyboard Optimization

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