

Assignment 1

Search, Classify, and Summarize

Draft for peer due Apr. 27, 2016, 6:00 AM
Peer review Apr. 27–May 02, 2016
Final submission due May 04, 2016 6:00 AM

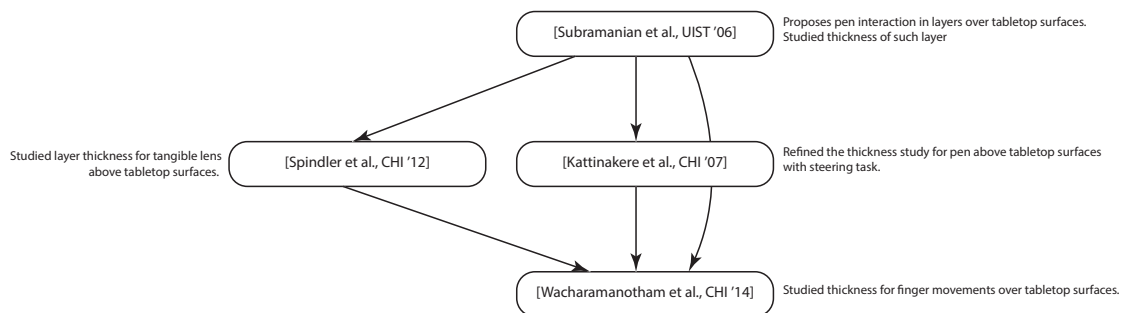
Group size: 6–7

Description

In this assignment, you will practice skills in literature research: acquiring research papers, classifying research papers, and summarizing research papers.

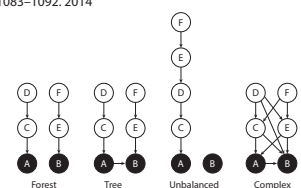
Task

- Paper acquisition:** You will acquire papers from the proceedings of recent CHI, UIST, Mobile HCI, and ITS conference from ACM digital library for this task. (Get full papers or notes, not posters or extended abstracts.) Each group will acquire papers in one of the following topic: text entry on touchscreens, text entry on mobile devices, or text entry for users with disability. (Topic to be assigned by an email from Phil.) Acquire one paper per each team member. (For a team of 6, a total of 6 papers should be acquired for this assignment.) Use the following two strategies for the acquisition:
 - Breadth-first:** Scan the latest year of the conferences (2015/2016) for the papers that match your topic. Read the title (and maybe abstract) to confirm this. Acquire at least two papers via this strategy.
 - Depth-first:** For each paper you acquired from the first strategy, check its bibliography and track down previous works that are important for the arguments in the paper (usually those are cited in Related Work section). Apply the same method to the paper you acquired to track the ancestor line. E.g., for a team of six, you will have four papers in this category.
- Paper lineage visualization:** Create a directed graph showing the relationship among the selected papers. Label each node of the graph with the name of the first author, conference, and year. Label each node with a short description how each of the predecessor paper supports the argument in the subsequent papers. The description should provide adequate detail of the main part that is related of the main paper.



[Subramanian et al., UIST '06] S. Subramanian, D. Aliakseyeu, and A. Lucero. Multi-layer interaction for digital tables. In UIST '06, 269–272. 2006.
[Kattinakere et al., CHI '07] R. S. Kattinakere, T. Grossman, and S. Subramanian. Modeling steering within above-the-surface interaction layers. In CHI '07, 317–326. 2007.
[Spindler et al., CHI '12] M. Spindler, M. Martsch, and R. Dachsel. Going beyond the surface: studying multi-layer interaction above the tabletop. In CHI '12, 1277–1286. 2012
[Wacharamanotham et al., 2014] C. Wacharamanotham, K. Todi, M. Pye, and J. Borchers. Understanding Finger Input Above Desktop Devices. In CHI '14, 1083–1092. 2014

It is possible that your graph is a forest, imbalanced, or have complex relationships similar to the graph on the right.



3. *Paper classification*: For each of paper you retrieved from Breadth-first strategy (1.a.), classify the research *approaches* and *contribution type* the authors attempted to make. In case of empirical research, specify explicitly the type of observation and data collection strategy (descriptive, correlational, experimental). Read the introduction and the conclusion section as well as skimming the overall structure of the paper to find the cues. Create a table similar to the following to summarize your classification.

Article	Research approach	Contribution type
Wacharamanatham et al., CHI '14	Empirical (experimental)	Empirical
Subramanian et al. UIST '06	Engineering & Design, Empirical (experimental)	Artifact, Empirical

4. *Paper summarization*: Pick three papers from your set and write a 30-word contributions and benefits statement. (See the guide and examples in the link section.) Copying the statement directly from conference proceedings will be considered as plagiarism. Clearly state the context of the research, in particular: task, user group, and platform (e.g., mobile phone). Use precise wording, e.g., “study” is less precise than “experiment”, “user performance” is less precise than “speed and accuracy”.

Submission

Draft for peer review: Prepare one Google Document containing all of your submission material and set the permission to allow anyone who has the link to comment. Do not include the name of members in this document. Send the link to wacker@cs.rwth-aachen.de with the subject “[CTHCI 2016] A01 draft”. See the due date above.

Peer review: You will receive a link to the submissions that you have to review. Add comments to the document to give the feedback within the duration above. During this duration, do not modify your own draft, as there may be multiple peer groups giving the feedback to your work.

Final submission:

1. Add the names and matriculation numbers of team members to the document.
2. Add a section “Peer feedback rating”. Rate the quality of peer feedback from 1 (worst) to 5 (best). You may, optionally, add free-text feedback for the peer feedback here as well.
3. Create a PDF file.
4. Send it to wacker@cs.rwth-aachen.de with the subject “[CTHCI 2016] A01 Final Submission”. See the due date above.

Links (Use only these conferences)

- CHI: <http://dl.acm.org/event.cfm?id=RE151&tab=pubs>
- UIST: <http://dl.acm.org/event.cfm?id=RE172&tab=pubs>
- Mobile HCI: <http://dl.acm.org/event.cfm?id=RE395&tab=pubs>
- ISS: <http://dl.acm.org/event.cfm?id=RE124&tab=pubs>
- Guide on writing Contributions & Benefits Statement:
<http://www.sigchi.org/chi2002/statement-cont-ben.html>