



1st Aachen Writing Workshop

Prof. Dr. Jan Borchers • hci.ac/writing-workshop



RWTHAACHEN
UNIVERSITY

hci.ac/writing-workshop

Slack: #writing-workshop

Today's Schedule: Thu

12:30 Welcome and Lunch (free)

13:15 Identifying good research topics and questions: Finding your Unfair Advantages

13:45 Activity: Discover Your Lab

14:15 Wobbrock's Wisdom: Understanding CHI paper structure and avoiding common pitfalls

14:30 Activity: Find Your Paper Pitfalls

15:00 Coffee Break

15:30 The Storyline Technique (hci.ac/storyline)

16:00 Activity: Your Storyline

17:00 Life as an AC: Why We Reject or Accept Your Papers

17:30 Reflection on Day One

18:00 Transfer to Dinner

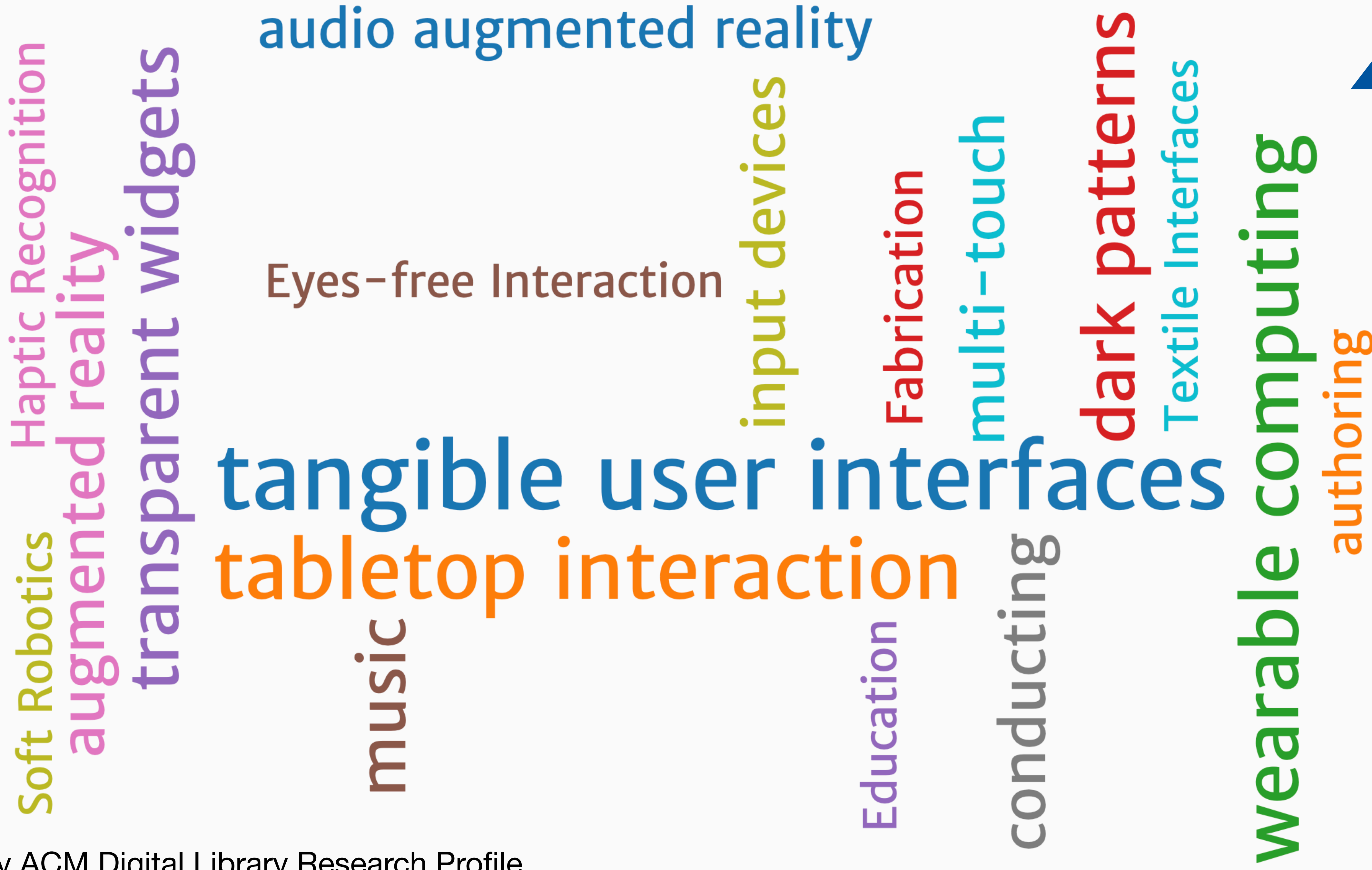
18:30 Dinner at SmashUp! Burgers, Schmiedstr. 5, Aachen (next to Aachen Cathedral)

21:00 Drinks at Grotesque Absinth Bar, Rennbahn 1 (around the corner from SmashUp)

Research Topics: Checklist



1. **Lab topics** and expertise (current and recent projects & people): tree model
 - Why are you doing your PhD *here*? — Discover your lab!



Activity: Discover Your Lab

- Find, read the abstract, and write a 30-word Contribution and Benefit statement of the following (some may overlap):
 - Your lab's three most-cited papers **ever**
 - Your lab's three most-cited papers in the last **five** years
 - Your lab's three most-**downloaded** papers in the last five years
- Bonus:
 - Your lab's three most recent **award**-winning papers
 - Your lab's three most recent **PhD** theses
 - Your lab's three most recent research **grants** (received or under submission)

Contribution and Benefits

- See also: ‘[Statement of Contribution and Benefits](#)’ (Newman, for CHI 2002)
- Describes the **contribution made** by the paper to HCI and the **benefit to people**
- **30 words** or less, two short bullet-point sentences
- Examples:
 - *Describes a camera-based technique for tracking a laser pointer on a large display, and appropriate interactor widgets: provides an inexpensive way to support group interaction with one display.*
 - *Offers guidelines for the design of interfaces to be used by brain-injured people via the Cyberlink interface; usage can lead to improved communication by the brain-injured.*

Activity: Discover Your Lab

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Research Topics: Checklist



1. **Lab topics** and expertise (current and recent projects & people): tree model
 - Why are you doing your PhD *here*?
2. Lab infrastructure (**unfair advantage**): other strong departments, equipment,...

Activity: Discover Your Lab (II)

- List five unique features of your lab environment that could give you an “unfair advantage”
 - Equipment, infrastructure, particular skills and interests of your advisor/colleagues/students, strong labs to collaborate with, industry projects as testbeds,...
- How does your research make use of these unfair advantages? How could it?

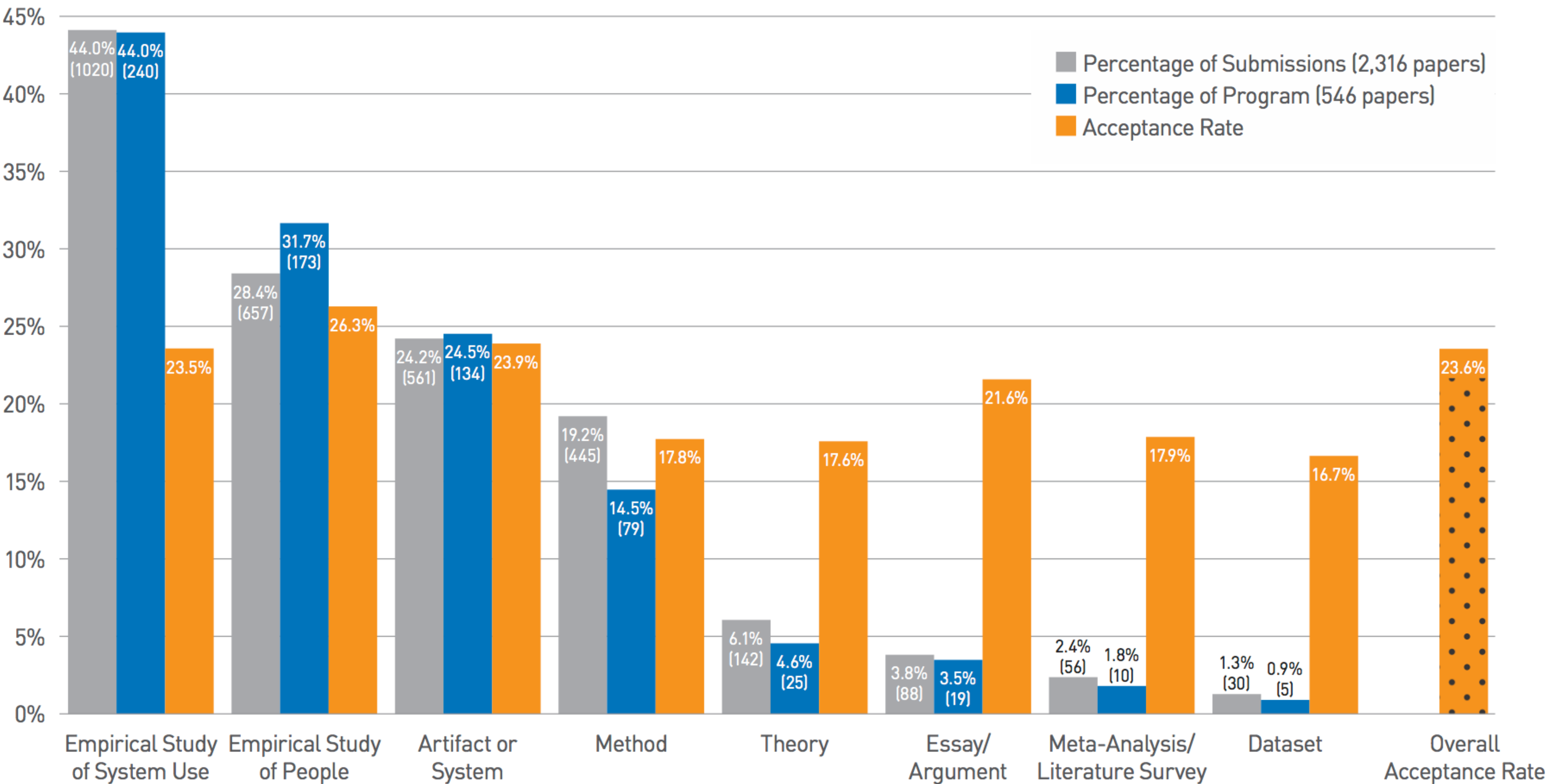
Research Topics: Checklist



1. **Lab topics** and expertise (current and recent projects & people): tree model
 - Why are you doing your PhD *here*?
2. Lab infrastructure (**unfair advantage**): other strong departments, equipment,...
3. Original **CHI**-level contribution

CHI 2016 by Contribution Type

(2,316 submissions, 546 acceptances, 23.6%)



Activity: Sharpening Your Contribution

- What are the contribution types of the papers you found from your lab?
- What contribution types are you planning to have? Do they match? If not, why?

Research Topics: Checklist



1. **Lab topics** and expertise (current and recent projects & people): tree model
 - Why are you doing your PhD *here*?
2. Lab infrastructure (**unfair advantage**): other strong departments, equipment,...
3. Original **CHI**-level contribution
4. € (funded research project ⇒
Hiwis, equipment, studies, travel, RQs, Ba/Ma/PhD thesis topics)
5. **Personally** motivating topics

A hand holding a blue pen points towards a document featuring various charts and graphs, including a bar chart and a line graph. The background is a light, blurred image of the document. A large, semi-transparent orange shape is on the left side of the slide.

Wobbrock's Wisdom

(Based on: Jacob Wobbrock,
“Catchy Titles Are Good: But Avoid Being Cute”, Whitepaper, 2015)

Wobbrock's Wisdom: Abstract

- Describe the work, not the paper
- Keep motivation to 1 sentence
- Describe what was done and the key (specific!) findings
- Make it valuable to browsing readers

Wobbrock's Wisdom: The 5-Point Introduction

- Explains *why* we did the work. Gets reader hooked. ~ 1 page for full paper.=
 1. State of the world in tech/people/behavior, can quote popular press
 2. The big “But, ...”: There is some issue/problem/opportunity — connect to things that matter to people!
 - “Absence from the literature” is a bad primary motivation (maybe it’s just not important?)
 3. Therefore, we did something (1 par)
 4. Key outcomes/findings (1 par)
 5. 1–3 Knowledge contributions (see his *interactions* article) as numbered list. Don’t overstate.
 - Show you addressed the opportunity/problem somewhat
 - Not just “opens up further research directions” (why didn’t you do it to get a real solution?)

Wobbrock's Wisdom: Related Work

- Answers who did what, what they found, and how your work differs (or how it influenced you)
- Teaching stance, educate, provide insights, not just laundry list
- Group by themes (can save you differentiation from every single paper)
- Your work doesn't need to be better, only different in RQs, methods, tech, or results

Wobbrock's Wisdom: Design

- If Artifact contribution: goals, principles, design rationale, process, how and why it works, properties, appearance, function, how and where it is used, limitations
- Replicable
- Lots of figures
- Implementation Details subsection (LoC, language, platform...)
- Replicable for expert reader

Wobbrock's Wisdom: Method

- Careful, detailed description — replicable for expert reader
- Following established norms
- Engineering papers may analyze artifact instead
- Quant Lab Exp:
 - Participant selection explained, replicable
 - Apparatus: Tech details
- Procedure: from arrival to departure, what's a trial?
- Statistical exp design and analysis
- Qual field study:
 - “Thicker” description of participants
 - Theory: provides reasons for study design choices
 - Procedures used in the field
 - Analysis: Provide representative code samples for GT; coding manual link

Wobbrock's Wisdom: Results

- Dispassionate
- Tell story with data
- Interpret effects (without judging significance)
- Stats: replicable for expert reader

Wobbrock's Wisdom: Discussion

- What was interesting / surprising / unexpected / intriguing?
- What matters?
- What do the results mean for us?
- Include limitations (1 par)

Wobbrock's Wisdom: Future Work

- Not an incremental todo list
- Instead: fewer, inspiring intellectual directions
 - Could be basis for a research grant application

Wobbrock's Wisdom: Conclusion

- Show that you delivered on claims
- Contributions
- Key takeaways
- Point to a bright future
- Zoom out, broader audience
 - News story, press material?

Activity: Wobbrock's Wisdom

- Look at each section of your latest paper
- Identify where you can apply Wobbrock's guidelines
- Skim over Wobbrock's paper if you need more detail

A hand holding a blue pen points towards a document featuring various charts and graphs, including a bar chart and a line graph. The background is a soft-focus image of the document, with a yellow geometric shape in the bottom-left corner.

Storyline

See hci.ac/storyline

Storyline

You are planning to write a long text like a paper or research proposal?

Start by writing down its “Storyline” (or “Roter Faden” in German).

It captures the key argumentative flow of your planned text.

It takes the reader by the hand and guides them through your argument.

It's a very short text, around 300 words for a full paper.

Each sentence is also as short as possible.

Usually, it's just a main clause (Hauptsatz).

Avoid relative clauses with lots of commas.

This helps you keep your thinking and writing clear.

But write full sentences, not just bullet points.

Also, tie each sentence to the one before with "argumentative glue code" where possible.

Examples are “Therefore”, “However”, “Furthermore”, “For example”, and “But”

Each sentence should follow logically from the one before.

Some sentences will be claims that need a reference to back them up.

Just mark such sentences with “[]” at the end.

That indicates that you have a reference.

Put each sentence on a line by itself.

This lets you rearrange your argument easily.

A Storyline will help you express your argumentative flow as clearly as possible.

It also helps you remember your core argumentative flow when writing your paper or video script later.

And it's a great document to introduce coauthors or advisors to your paper plan.

Plus, it works like an early paper prototype:

It encourages high-level structural feedback instead of detailed comments.

Add it to your Overleaf project as **storyline.txt** at the root level.

This helps everyone find it again.

This guide itself is an example of a Storyline.



Activity: Storyline

- Write a storyline for your latest paper or current draft (if you're comfortable)
- Add it as `storyline.txt` to the root of your Overleaf project
- Afterwards, read it with your neighbor: Do they get it?



A hand holding a blue pen points towards a document featuring various charts and graphs, including a bar chart and a line graph. The document is partially obscured by a large orange geometric shape on the left side. The title 'Life As An AC' is prominently displayed in the center.

Life As An AC

Life As An AC

- Sniper Rifle, not Shotgun
- Due to AI polish, ACs now dig deeper into credibility, quality, excitement
- ACs push hard for limited paper lengths
- AC as career booster
- Start as reviewer and with small conferences, to graduate to CHI AC
- 1AC: Reviewer or moderator?



Reflection

Day One

A hand holding a blue pen points at a bar chart on a document. The chart has several bars with segments in blue, red, and yellow. To the right of the chart, there is a line graph with green and red lines. The word 'Friday' is written in large, bold, black letters over the chart. The background is a light gray with a yellow geometric shape in the bottom left corner.

Friday

Today's Schedule: Fri

09:00 Best Of #chi-authors: Concrete tips from years of advising students writing CHI papers

09:30 Activity: Debugging Your (Current or Last) Paper

10:00 Time Management Techniques: Getting Things Done (GTD)

10:30 Coffee Break

11:00 Activity: GTD Mindsweep and Processing "In"

11:30 How To Use AI Writing Tools Without Becoming A Vegetable (hci.ac/biotext)

12:00 Lunch (free)

13:00 CHI Paper Writing: More Vetted Resources (from Lennart Nacke and others)

13:30 Reflection on Day Two

14:00 End

A hand holding a blue pen points towards a document featuring various charts and graphs, including bar charts and line graphs. The background is a light, blurred image of the document. A large, bold, black text overlay reads "Best of #chi-authors".

Best of #chi-authors

Best Of #chi-authors: Author Information

- Use same institutional information for all authors
- Use institutional email addresses to show affiliation
- See hci.ac/paper-guide
- Talk to your advisor
- Example:

John Doe
RWTH Aachen University
52056 Aachen, Germany
doe@cs.rwth-aachen.de

Best Of #chi-authors: Related Work

- Avoid [13,25,42,66,67]
 - Explain contribution and missing delta for each reference
 - Readers should not have to read all the related work for this
- Neither be intimidated nor talk down work by others
 - Instead, appreciate it and understand them as collaborators across space and time (how research works)
- Referring to own work? <https://chi2024.acm.org/submission-guides/chi-anonymization-policy/>

Best Of #chi-authors: Figures & Captions

- No text in Figures < 8 pt. Else, use gray bars.
- My Great Capture Rule: Every capture at least two sentences
 1. What are we looking at?
 2. What should we take away?
- Example: “Fig. 6. Mean response times for the different two-player versions of the game, with 95% confidence intervals. Players reacted significantly faster in the tangible than virtual conditions.” [Cherek, CHI’18]

Best Of #chi-authors: References

- **Your references are a business card showing off your professionalism**
- See hci.ac/bibtex-guide for details
- Purposes: glancability, information scent, value judgment
- Build your personal (BibTeX) collection
- **Never. Trust. Reference. Data.** (ACM DL, G Scholar). Always look at the PDF.
- Consistency (conference names, capitalization—beware BibTeX).

René Schäfer, Paul Preuschoff, René Röpke, Sarah Sahabi, and Jan Borchers. 2024. Fighting Malicious Designs: Towards Visual Countermeasures Against Dark Patterns. In *Proceedings of the 2024 Conference on Human Factors in Computing Systems (CHI '24)*, May 11–16, 2024, Honolulu, HI, USA. ACM, New York, NY, USA, Article 296, 13 pages. <https://doi.org/10.1145/3613904.3642661>

Best Of #chi-authors: References

- arXiv: peer reviewed+accepted+published ⇒ cite conference/journal.
Else, not science yet ⇒ footnote, or see ACM's Reference Tips.
- Authors: full names, accents, check PDF
- Title: Capitalize all words except short binding words (Chicago Manual of Style / CMOS)
- Spell out conference and journal names and publishers consistently
- Page range or length (**numpages**)?
- Clickable DOIs linking to doi.org (not acm.org, etc.)
- Fix BibTeX-incompatible characters (—, &, `, ')

Best Of #chi-authors: Video Figure

- Make one even if it's optional
- ~3 min, not just 30 s teaser, not full 10 min talk
- Reviewers will watch this first
- Great for sharing and explaining your work
- Conversational: Talk like you talk, not like you write (use Storyline, not Abstract)
- Sketch storyboard first, then time text and align visuals
- Find a good, near-native human speaker — no AI voice!

Best Of #chi-authors: Supplements

- ACM improved supplement handling in 2024 (research data)
- Video, audio, software, datasets, presentation slides, other artifacts
- Read <https://chi2024.acm.org/2024/02/08/artifacts-at-chi-2024/> for details
- Make software available to reviewers (and readers)
 - Enables review, validation, and replication
 - Submit as supplement
 - If it has to be online, use osf.io or [anonymous github](https://github.com)
 - Nice example: intellitex-doublecoat.github.io

Best Of #chi-authors: Paper Length

- Write concisely!
- More likely to be read, happier reviewers, more contribution per page
- Shortening always tightens up and clarifies your writing
- Read Strunk & White: The Elements of Style (“omit needless words” etc.)
- UIST is likely going back to 10 pages + refs next year
- “Wilson et al. [8] found that grass is green” \Rightarrow “Grass is green [8]“

Best Of #chi-authors: Writing Style

- Get Grammarly (free for ACM SIGCHI members): hci.ac/grammarly
- Spell-check anything you ask others to read (courtesy and efficiency)
- Strunk & White
- Use glue code in your text

Best Of #chi-authors: LaTeX/Overleaf

- Naming standards, account roles: hci.ac/overleaf
- Know your `~`, `\(space)`, `\title[shorttitle]{longtitle}`

Best Of #chi-authors: Time Management

- Last-minute changes \Rightarrow stupid mistakes \Rightarrow bad impression \Rightarrow reject
- Check student/Hiwi/coauthor schedules early
- Advisor review: \sim 2 days
- Schedule all lab submissions
- Include time for video(s)

Best Of #chi-authors: Word Count

- Check the word count rules for your venue
 - CHI'25: “excluding references, figure/table captions, and appendices.”
1. In main.tex:
 - Remove **review** from `\documentclass{}` for line numbers
 - After `\begin{document}`: `\renewcommand{\caption}[1]{} to hide captions`
 2. Open PDF in free **FoxIt PDF Reader**
 3. Select all until References, **View:Word Count**
 - ***Remember to revert changes in main.tex before submitting! (desk reject)***

Best Of #chi-authors: Subcommittee & Reviewers

- Match subcommittee by topics and methods of sample papers, and known relevant authors
 - Supports fair review
- Always propose 3+ reviewers!
 - Not conflicted
 - Not on any subcommittee
 - Not in other roles for the conference
 - Explain why relevant
 - Supports fair review

Last-Minute Sanity Checks

- Correct author names, title, and affiliations — frozen later!
- No LaTeX code, line breaks, weird characters in title & abstract in PCS
 - *“To demonstrate the effectiveness of `\name{}`, we conducted a workshop...” :)*

Best Of #chi-authors: Upon Acceptance

- De-anonymize references to own work: “Borchers [17]” \Rightarrow “we/our group” [17]
- De-anonymize supplements and repositories

Activity: Best Of #chi-authors

- Open your latest paper or draft
- Apply some of the tips you just heard
- If nothing else, identify good reviewers for your upcoming paper

GTD





**YOUR MIND IS FOR HAVING IDEAS,
NOT HOLDING THEM.TM**

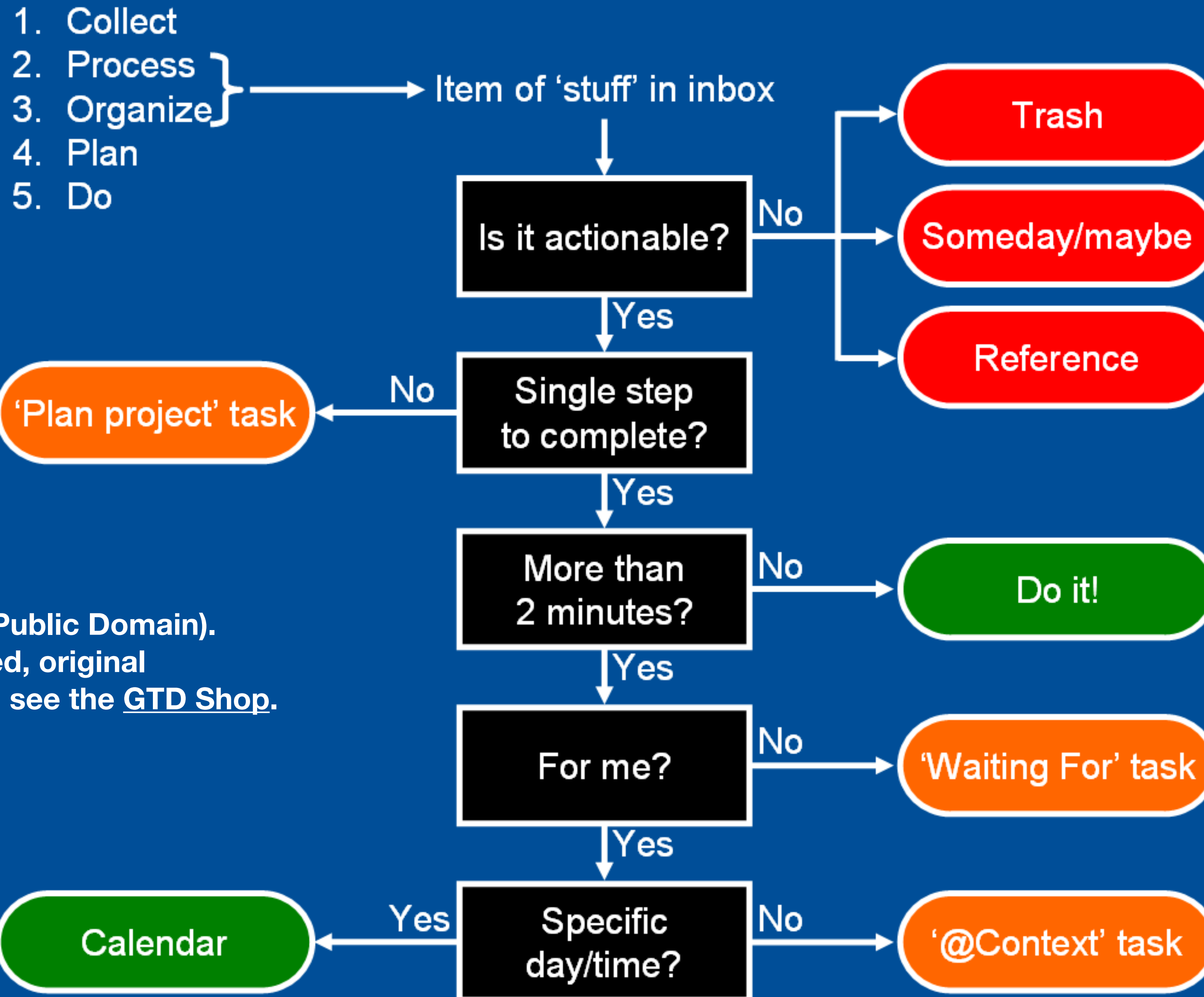
—David Allen

Why GTD?

- Externalize
- Stress-free productivity
- Be reliable and trusted
- Technology-agnostic but geek-friendly
- Popular

GTD On One Page

- Constant Capture
- Process Inbox Daily — Clarify & Organize
- Weekly Review



Source: Wikipedia (Public Domain).
For the more detailed, original
GTD Workflow Map, see the [GTD Shop](#).



CAPTURE

01

CAPTURE

COLLECT WHAT HAS YOUR ATTENTION

COLLECT WHAT HAS YOUR ATTENTION

Use an in-basket, notepad, or voice recorder to capture 100% of everything that has your attention. Little, big, personal and professional--all your to-do's, projects, things to handle or finish.



CAPTURE

01

CAPTURE

COLLECT WHAT HAS YOUR ATTENTION

- “Stuff”
- Mind Sweep
- Trusted System
- Ubiquitous, Rapid Capture (Siri reminders,...)

Activity: Mind Sweep (5 min)

- Write down *anything* you currently have on your mind as a to do
- Big and small, personal and professional
- Some triggers if you stall:
 - Look at your calendar for the next 2 weeks — anything there remind you of something you'd like to do beforehand?
 - Think about the most awesome project on your mind — “Oh yeah, I need to consider...”

How does that feel?



CLARIFY

02

CLARIFY

PROCESS WHAT IT MEANS

PROCESS WHAT IT MEANS

Take everything that you capture and ask: Is it actionable? If no, then trash it, incubate it, or file it as reference. If yes, decide the very next action required. If it will take less than two minutes, do it now. If not, delegate it if you can; or put it on a list to do when you can.



ORGANIZE

03

ORGANIZE

PUT IT WHERE IT BELONGS

PUT IT WHERE IT BELONGS

Put action reminders on the right lists. For example create lists for the appropriate categories--calls to make, errands to run, emails to send, etc.

Clarify and Organize (10 min)

- Contexts: Calls, Computer, (online?), Anytime
- Also for locations (Home, Office) and people (“Agenda” for spouse, colleagues, clients)
- Contexts are orthogonal to projects
- (In OmniFocus, Contexts are now called Tags)



REFLECT

04

REFLECT

REVIEW FREQUENTLY

REVIEW FREQUENTLY

Look over your lists as often as necessary to determine what to do next. Do a weekly review to clean up, update your lists, and clear your mind.

Review

- **Get clear**
 - Clear your desk
 - Scan in items, type in notes, file away clutter
 - Process your GTD Inbox to zero
 - Clear your head: Do another Mind Sweep
- **Get current:** Review each project and action list
 - Add actionable first step
 - Check off / Drop / (Un)Flag items, check Waiting-For items
- **Get creative:** New project ideas bugging you? First action?



ENGAGE

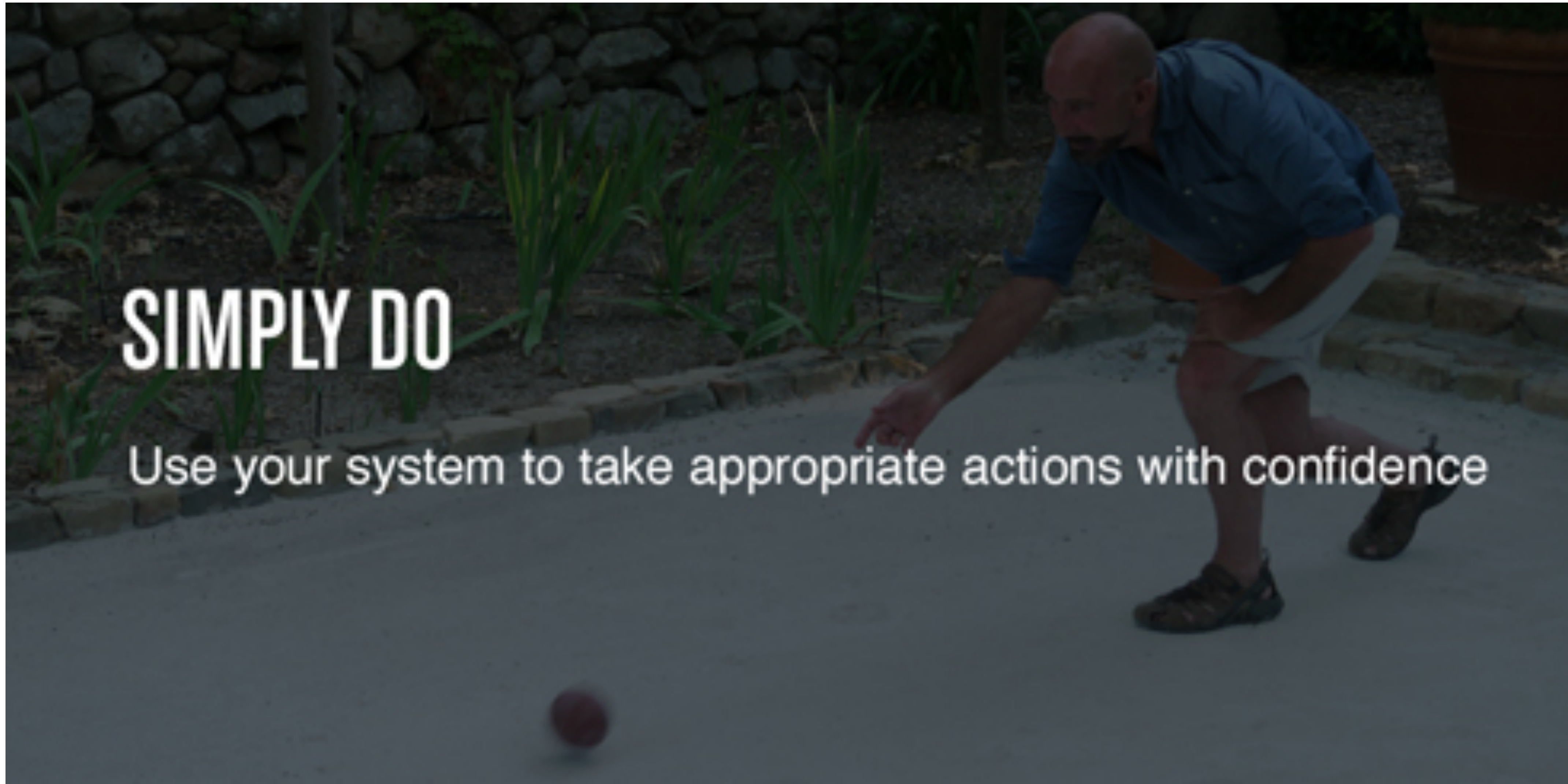
05

ENGAGE

SIMPLY DO

SIMPLY DO

Use your system to take appropriate actions with confidence



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AI Tools in Research and Writing

AI Tools in Research Writing

- Lennart Nacke: How HCI PhD students use AI tools (free article)
 - To develop RQs, justify methods, adjust tone & style
 - Tips: AI input = raw material, verify everything, infuse your identity, maintain transparency
 - Less hallucination: Consensus, Elicit, SciSpace, Scite,...
- A.R.I.A. (Sarah)
-

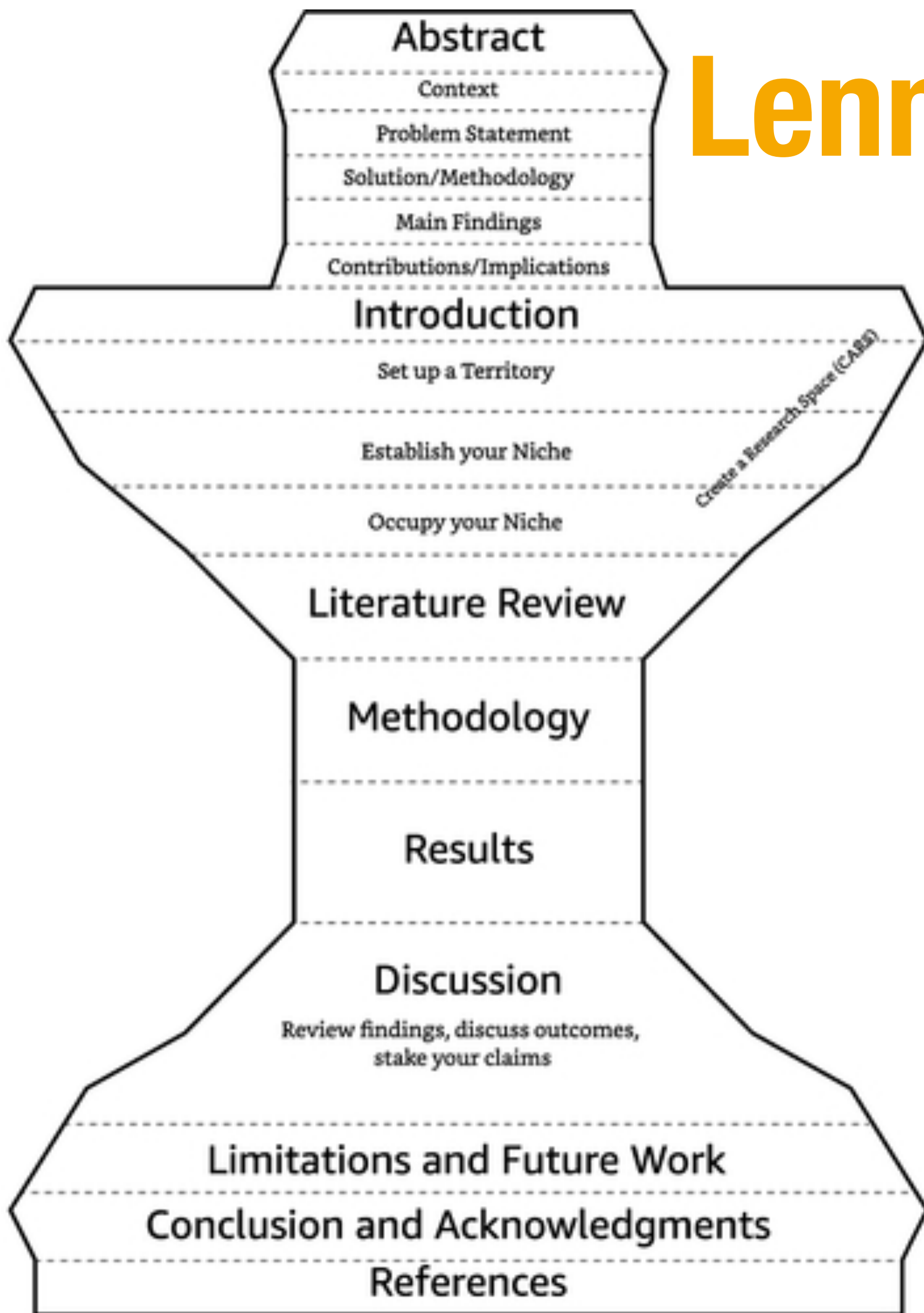
A hand holding a blue pen points towards a document featuring various charts and graphs, including a bar chart and a line graph. The document is partially obscured by a large, semi-transparent orange shape in the bottom left corner. The text 'Additional Resources' is prominently displayed in the center of the image.

Additional Resources

Some Additional Resources

- Johannes Schöning's Lab (St Gallen): **CHI's Greatest Hits: Analyzing the 100 Most-Cited Papers in 43 Years of Research at ACM CHI** ([interactions 1/2025](#))
- Henning Pohl and Aske Mottelson (Copenhagen): **How we Guide, Write, and Cite at CHI** ([CHI EA '19](#)) (not entirely serious)
- Antti Oulasvirta, Kasper Hornbæk: **HCI Research as Problem-Solving** (CHI '16)
- Jacob Wobbrock & Julie Kientz: **Research Contributions in Human-Computer Interaction** ([interactions 23\(3\)](#), 2016)
- Saul Greenberg, Bill Buxton: **Usability Evaluation Considered Harmful (Some of the Time)** (CHI '08)
- On **HCI Toolkit Research**: [Ledo CHI'18](#), [Olsen UIST'07](#)
- [Sample Lab Orientation and Guide](#) (Lana Yarosh, Minnesota)

Lennart Nacke's Resources



- HCI and Gamification researcher at U Waterloo, h=65
- Lots of resources on writing CHI papers (articles, annual CHI courses, podcast, YouTube channel, paid online course, **free newsletter**)
- E.g.: **How to Write Better CHI Papers (with AI)** (CHI EA'24)

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Reflection

Day Two