

TROY NACHTIGALL

LET'S WRITE AN ABSTRACT

Abstracts for Design Research



@troykyo via Midjourney

HOW MOST OF HCI WRITES AN ABSTRACT - PERFECTLY FINE...

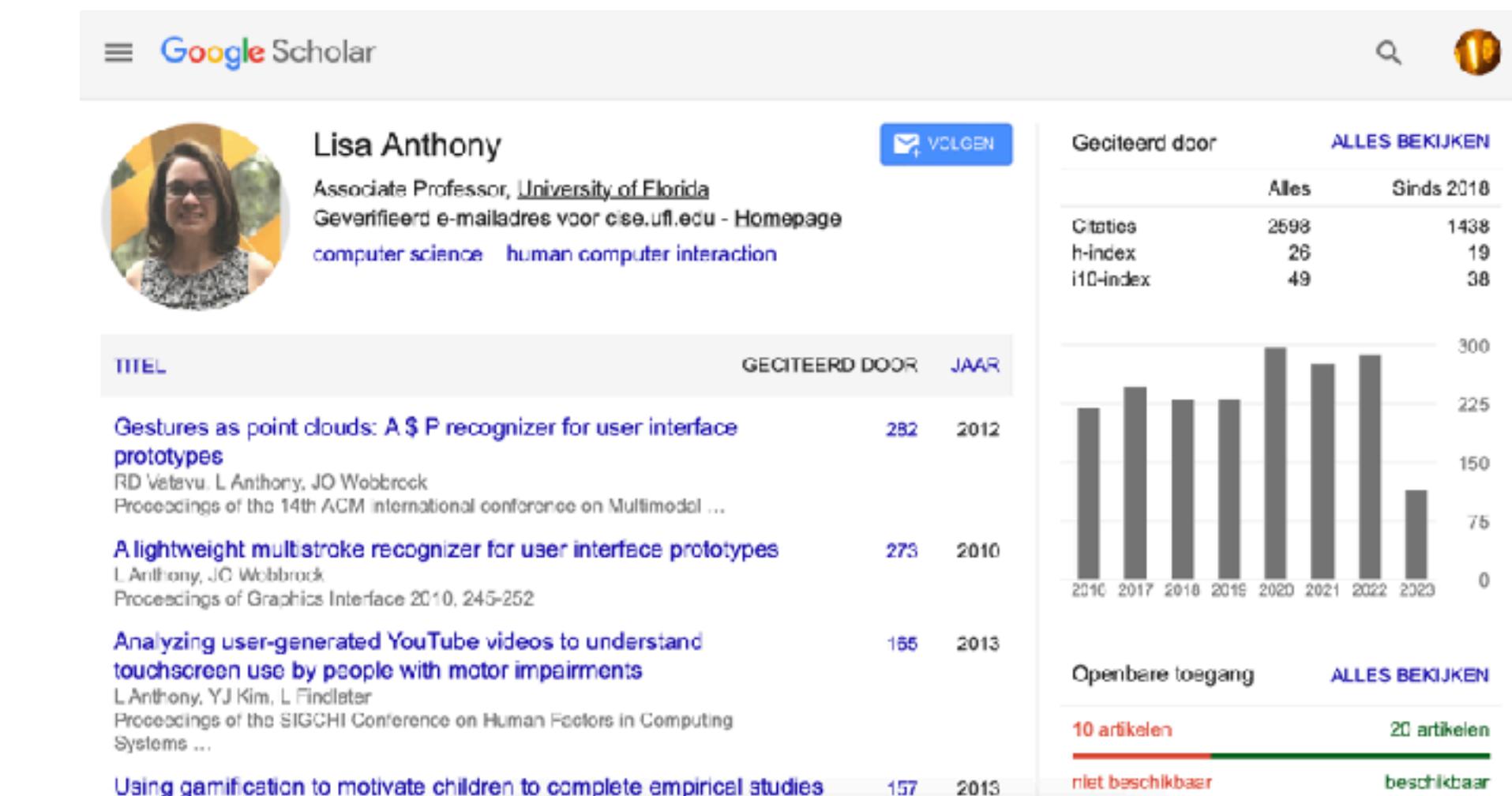
START WITH AN ABSTRACT

- I use this formula to write all my paper abstracts:
 - What is the problem? (1 sentence)
 - What is our solution? (1 sentence)
 - What did we do, specifically? (specific approach, 1-3 sentences)
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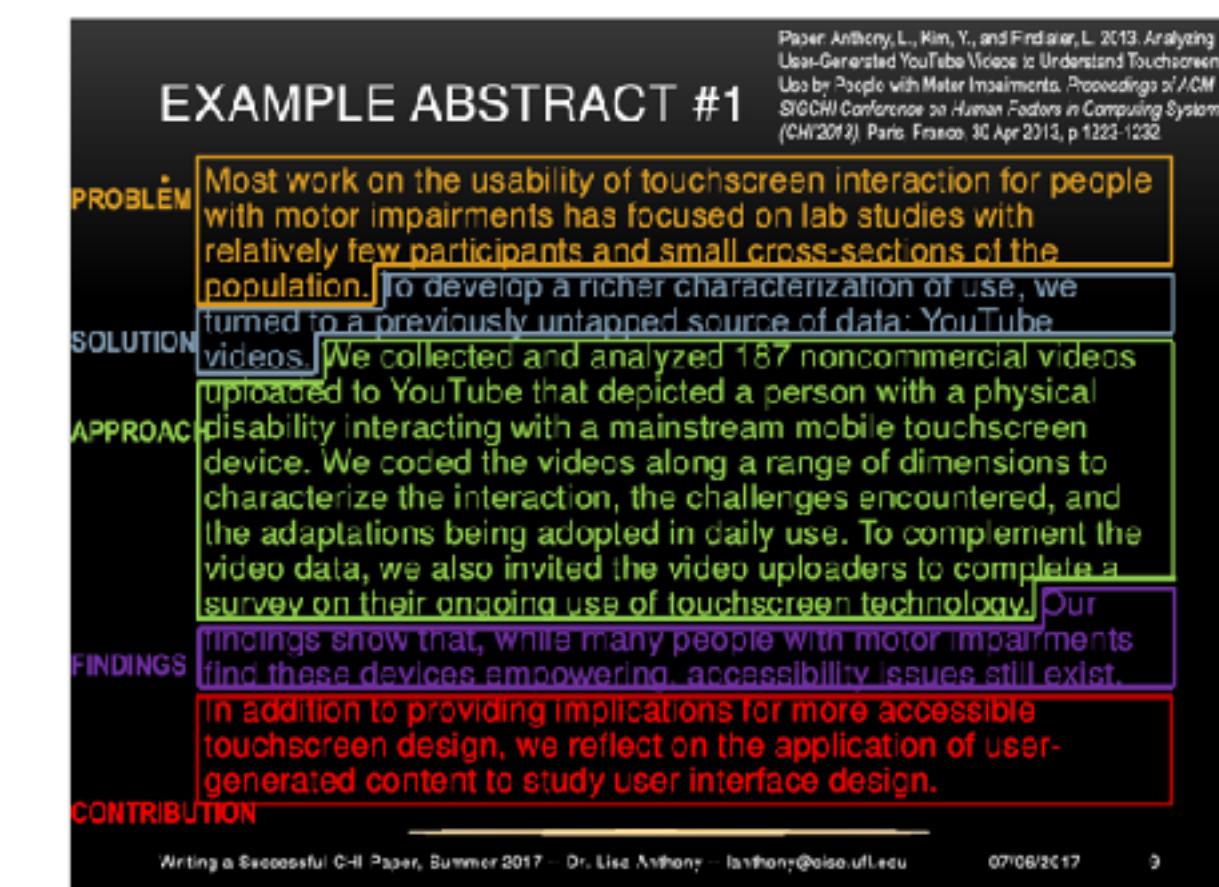
Writing a Successful CHI Paper, Summer 2017 -- Dr. Lisa Anthony -- lanthony@cise.ufl.edu

07/06/2017

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Lisa Anthony on Google Scholar



HOW DESIGN WRITES A PAPER AND ABSTRACT - DESIGN WORK...

COLUMN | CONFESSIONS



William Gaver,
Goldsmiths



Kristina Höök,
KTH

What Makes a Good CHI Design Paper?

In the last issue, we suggested that the perfect CHI design paper is a myth, not just because it is all but impossible to achieve, but also because there are so many ways to pursue and report design research. In this column, we suggest that a few ingredients seem to be present in all, or at least nearly all, submissions considered by the subcommittee to be successful enough for acceptance to this year's CHI conference. Each ingredient is a key factor in delivering *design practice as design research*. We hope that describing them here will help replace the imaginary perfect CHI design paper as a guide for both authors and—equally important—reviewers trying to identify valuable contributions to CHI.

Demonstrate and discuss design work. Not surprisingly, one of the key features of successful design papers is that they describe and discuss something to do with design. We're always excited to see submissions that explore design practice in some form, whether it's the development of artifacts; design processes, approaches, and methods; creative ways to engage with the settings for design; investigations of and with materials; or explorations of design's aesthetic qualities. We recognize, in addition, that design is an expanding field. Thus, "something to do with design" also includes design histories; critical-interpretaivist reflections on design; service, infrastructure, and activist design; as well as the whole burgeoning world of open-sourced, crowd-funded, hacker-spaced, cooperatively produced, data-fueled, and user-finished designs. Moreover, we love surprises, so keep sending us the experimental, avant-garde, transdisciplinary submissions that don't fit elsewhere. Overall,

what we really want are papers with a contribution to design clearly at the heart of the work and that will clearly benefit from evaluations by ACs and reviewers from the design community.

Tell us what's important. Rather than trying to tick all the boxes of the perfect CHI design paper, it is sufficient, and often preferable, to focus on articulating one or two aspects of a project well. Crucial, however, is to tell the reader that this is what you are doing, and to explain why your focus is important and the grounds on which you believe it should be assessed. This is not only to guide readers toward what matters, but also to forestall criticism based on elements that aren't there or that are less well developed. For instance, you might focus on the development of a design space for an artifact that hasn't been fully fleshed out; discuss the interplay between designers, makers, funders, and manufacturers of a product you don't endorse; or critically analyze the gender assumptions of a service design without discussing how it is used. All could be viable topics for a successful CHI contribution. To make them work, however, it is essential that their focus is framed and justified as clearly as possible.

Show links to other work. As design research has flourished at CHI and elsewhere, the quantity of literature related to a given project can ramify outward indefinitely. Now that references do not count toward the CHI page limits, it is not unusual to see papers with 50 or more references. This may be a positive development in recognizing the development of design research as a discipline, but it can be overwhelming to authors and lead to papers overbalanced by their literature reviews or, conversely, with

nothing but long lists of uncommented references. Ultimately, an unending expansion of literature reviews could transform CHI design research from a primarily empirical community into an intertextual one. We believe that design papers should not be required to produce comprehensive literature reviews so much as sufficient ones. It is important to situate your work in the field, and this is usually done through references to other key papers. Written work, however, is not the only terrain for design research. Instead, design research can also be positioned alongside other design outputs or practices, including, naturally, those from industry or from practitioners outside the research community altogether.

Include a critical assessment. The idea that design research must be accompanied by a user study is a myth. Nonetheless, it is not enough simply to proffer a designed artifact (or process, or investigation, or even a user study) without any attempt to assess its strengths and limitations, or, alternatively, the effects it might have. Of course, user studies are one way to go about this, and the success of submissions that include them no doubt reinforces the myth. However, many other forms of assessment are also potentially valuable. This might include expert critiques from other practitioners, analyses by cultural theorists, considered accounts by relevant commentators, or even the reflections of the makers themselves. What is important, though, is that assessments are sincere and probing. It is rare to produce a flawless piece of work, and research papers are not marketing tools. One of the hallmarks of research is the ability to learn from failure, so accounts of research must



take a balanced view in assessing what they offer.

Tell us what you learned. A corollary of the need to go beyond merely presenting a design outcome as self-evidently worthy (and, indeed, of the need to frame what is important and link to other work) is the need to explain the lessons learned by producing it. Explaining that can take many forms. Research doesn't always produce facts: Equally useful are new conjectures, perspectives, suspicions—or, for that matter, support for or contradictions of existing ones. Learning may be equally expressed through theories, mid-level strong concepts, annotations, frameworks, or guidelines. It doesn't have to be, though. Some may feel that the outputs of design research—it's artifacts, processes, aesthetic studies, or engagements with people and places—offer value through their specificity, that generalization in any form dilutes that value, and that design practitioners routinely look to other design outcomes rather than generalizations as inspiration for their

own work. This is fine, too, so long as that specificity is identified and what it offers is made clear enough for readers (and reviewers!) to value. What is essential, however it is done, is that the contributions offered by reporting a project are clear.

These, then, are our reflections

about the essential features of good

CHI design papers. Just as crucial,

they imply the things we think are

not obligatory (reviewers take heed!).

Successful CHI submissions do not

have to include user studies (though

they do need some form of critical

assessment). They don't even have

to tell the story of a complete design

project (though they should have

something to do with design).

They do not need comprehensive literature

reviews (though they do need to link

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grand theories or research programs

(though they need to explain why

they were done). And they don't have to

generalize from the specific designs

to a class of systems (though they do need

to explain what was learned).

There are endless possibilities for

the careful articulation of research about, through, into, by, over, during, or of design, and we earnestly hope the community will continue to produce new and unexpected examples. Our aim here has been to open the doors for these possibilities, both by dispelling the myth of the perfect CHI design paper and by communicating to would-be authors—and reviewers—what we think it takes to write a successful submission.

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DEMONSTRATE AND DISCUSS THE DESIGN WORK:

- Describe your design practice, including artifacts, processes, methods, and aesthetics.
- Embrace design histories, critical reflections, service design, and emerging trends.
- Is it experimental, avant-garde, and trans-disciplinary?
- In this paper I (we) describe how we made a Thing, Service, Process...
- Explain it to your grandmother.



**WHAT ARTIFACTS, PROCESSES, METHODS, OR AESTHETIC QUALITIES
DID YOU FOCUS ON? WHAT DID YOU MAKE?**

**HOW DID YOU EXPLORE OR EXPERIMENT WITH DESIGN PRACTICE IN YOUR
PROJECT?**

WHAT DID YOU DO? SPECIFICALLY

TELL IT TO YOUR GRANDMA

TELL US WHAT'S IMPORTANT:

- What is the most important aspect of your design.
- Explain the importance and establish grounds for assessing the chosen focus. (Who uses it?)
- Guide readers toward important aspects and address potential criticisms. People often think...
- Examples: Developing design spaces, interplay among stakeholders, critical analysis of assumptions.



**WHAT SPECIFIC ASPECTS OF YOUR PROJECT WERE INTERESTING
OR IMPORTANT? WHY?**

HOW DID YOU JUSTIFY THEIR SIGNIFICANCE, CRITICALLY?

WHY SHOULD ANYBODY CARE?

WHAT ARE THE CHALLENGES AND OPPORTUNITIES?

WHAT LINKS TO OTHER WORK:

- Situate the work in the field.
- Used theories, concepts, annotations, frameworks, or guidelines.
- Acknowledge design research alongside industry or practitioner outputs.
- Recognize the growth of design research and its disciplinary development.



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**WHO ELSE IS DOING SIMILAR ARTIFACTS, PROCESSES, METHODS, OR
AESTHETIC QUALITIES?**

ARE YOU DIFFERENT OR DO YOU CONFIRM WHAT THEY FIND?

WHAT IS NEW HERE?

SITUATE: TELL US WHAT THE DESIGN AND DESIGN PROCESS IS LIKE.

INCLUDE A CRITICAL ASSESSMENT

- Assess strengths, limitations, and effects of artifacts, processes, or investigations.
- Value alternative assessment methods: expert critiques, cultural theorists' analyses, maker reflections.
- Examples: Interviews, Workshops, Auto-Ethnography, User studies...



WHAT ASSESSMENT METHODS DID YOU EMPLOY?

**HOW DID YOU ASSESS THE STRENGTHS, LIMITATIONS, OR EFFECTS OF
YOUR DESIGNED ARTIFACT, PROCESS, OR INVESTIGATION?**

WHAT FORMS OF ASSESSMENT DID YOU FIND VALUABLE?

HOW CAN WE TRUST WHAT YOU'VE SAID?

TELL US WHAT YOU LEARNED:

- Communicate the contributions offered by reporting a project are clear to readers and reviewers.
- Go beyond presenting design outcomes as self-evident; explain lessons learned.
- Express learning through new conjectures, perspectives, suspicions, or support/contradictions.
- Value specificity in design research outputs, offer clear identification and explanation.



WHAT NEW PERSPECTIVES, THEORIES, OR INSIGHTS EMERGED?

HOW DID YOU CONVEY THE VALUE AND SPECIFICITY OF YOUR DESIGN RESEARCH OUTPUTS?

IN WHAT WAYS DID YOUR DESIGN WORK CONTRIBUTE TO THE FIELD?

HOW DID IT BENEFIT FROM EVALUATIONS BY THE DESIGN COMMUNITY?

HOW DOES THIS HELP DESIGN? WHO DOES IT HELP?

A GOOD ABSTRACT
BECOMES A GOOD PAPER.

JUST ADD A LOT MORE DETAIL

HOW DESIGN WRITES AN ABSTRACT

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William Gaver is a professor of design and co-director of the Interaction Research Studio at Goldsmiths, University of London. His research on design-led methodologies and innovative technologies for everyday life led him to develop an internationally recognized studio that brings the skills of designers together with expertise in ubiquitous computing and sociology.
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Kristina Höök is a professor of interaction design at the Royal Institute of Technology (KTH) who also works part-time at RISE SICS. Her research on interaction concepts including social navigation, seamlessness, somaesthetic design, and mid-level strong concepts has been significantly influential on the application of theory to design practice within HCI.
→ khook@kth.se

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SHARE YOUR ABSTRACT

LET'S HELP EACH OTHER.

AND IF THAT DOESN'T WORK...

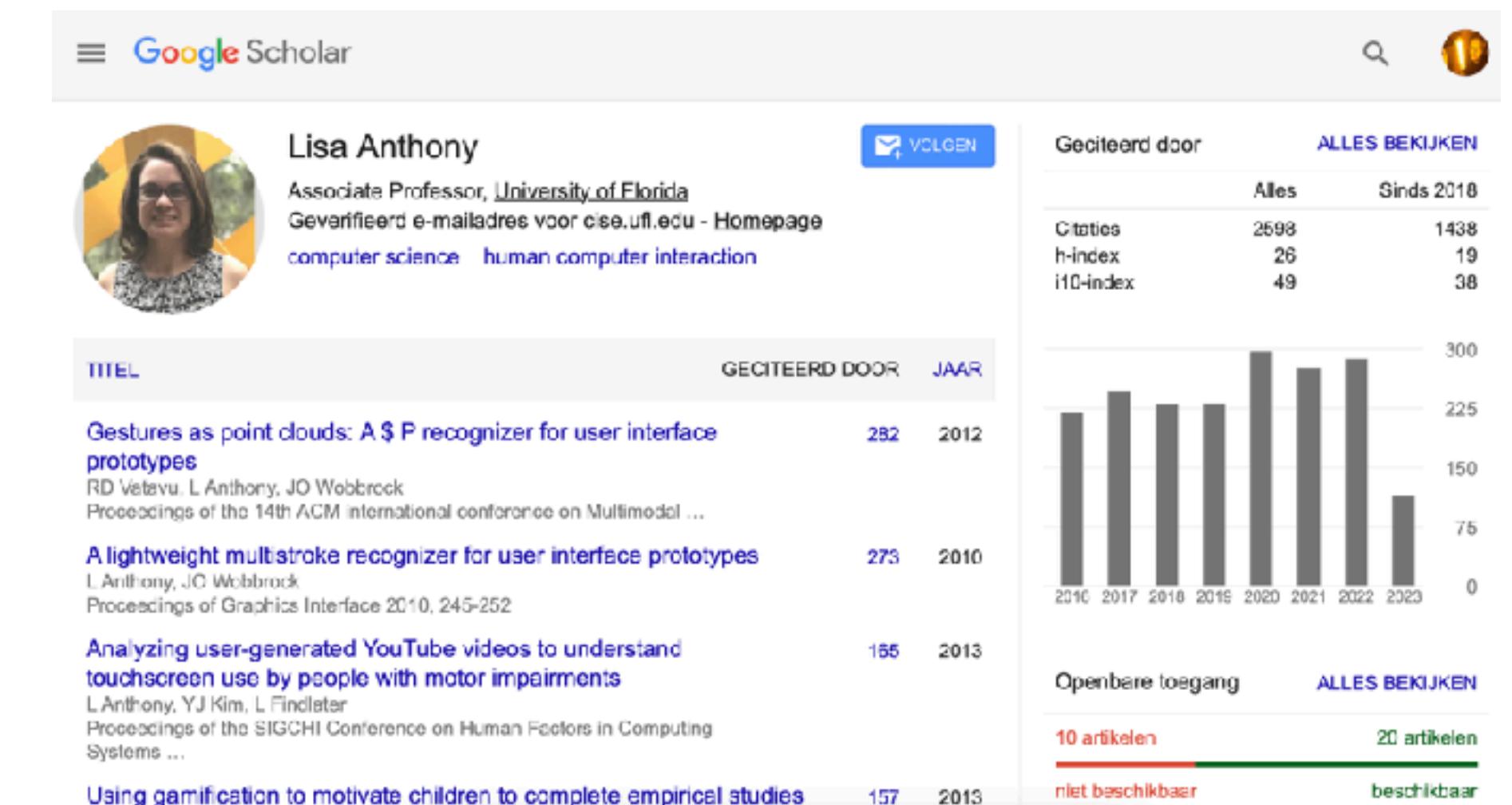
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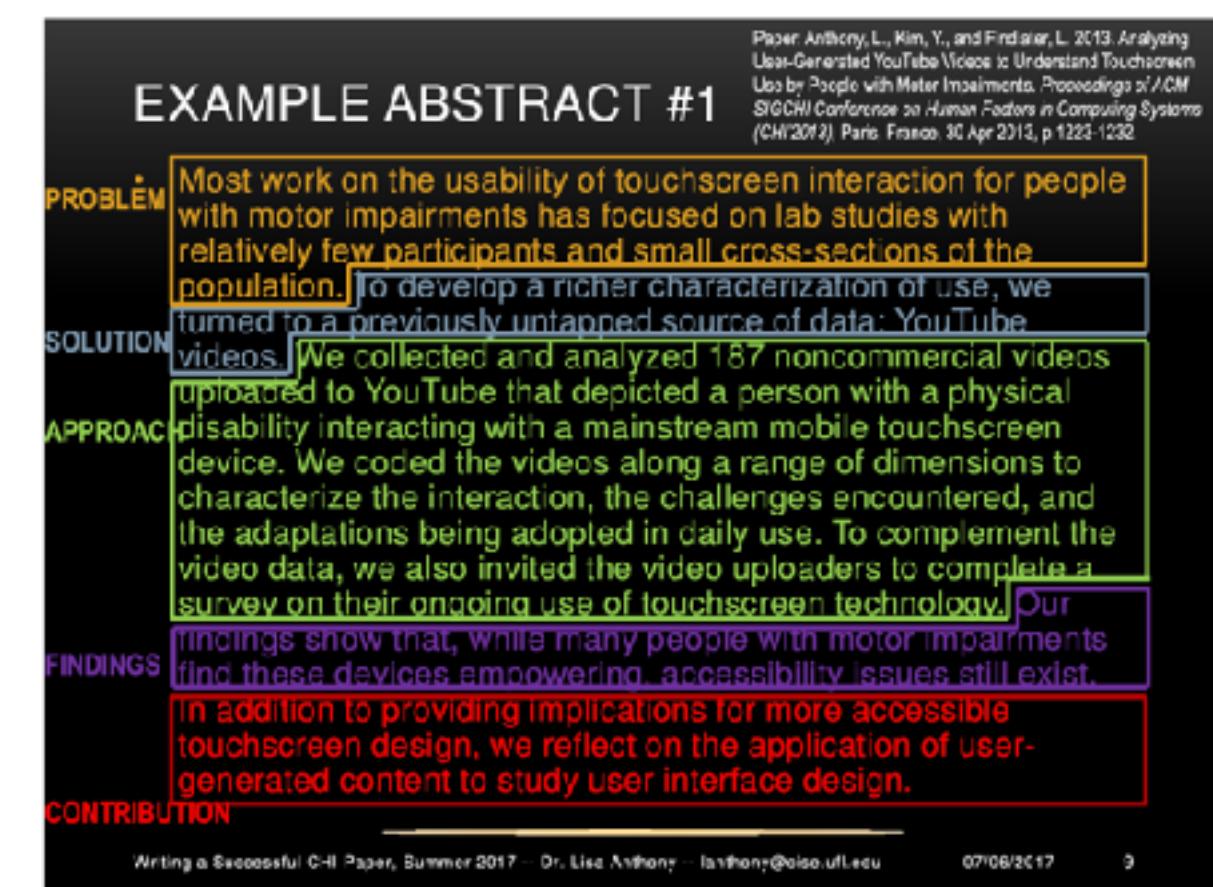
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