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Sprayable User Interfaces: Prototyping Large-Scale Interactive Surfaces with Sensors and Displays

Authors: Michael Wessely, Ticha Sethapakdi, Carlos Castillo, Jackson C. Snowden, Ollie Hanton, Isabel P. S. Qamar, Mike Fraser, Anne Roudaut, Stefanie Mueller Authors Info & Affiliations

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ABSTRACT

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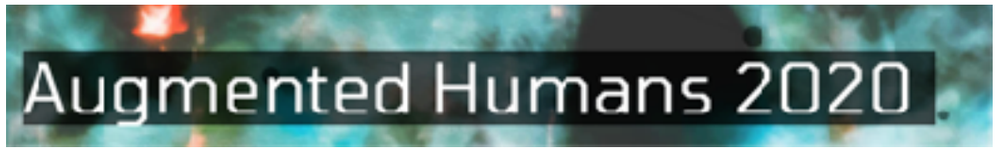

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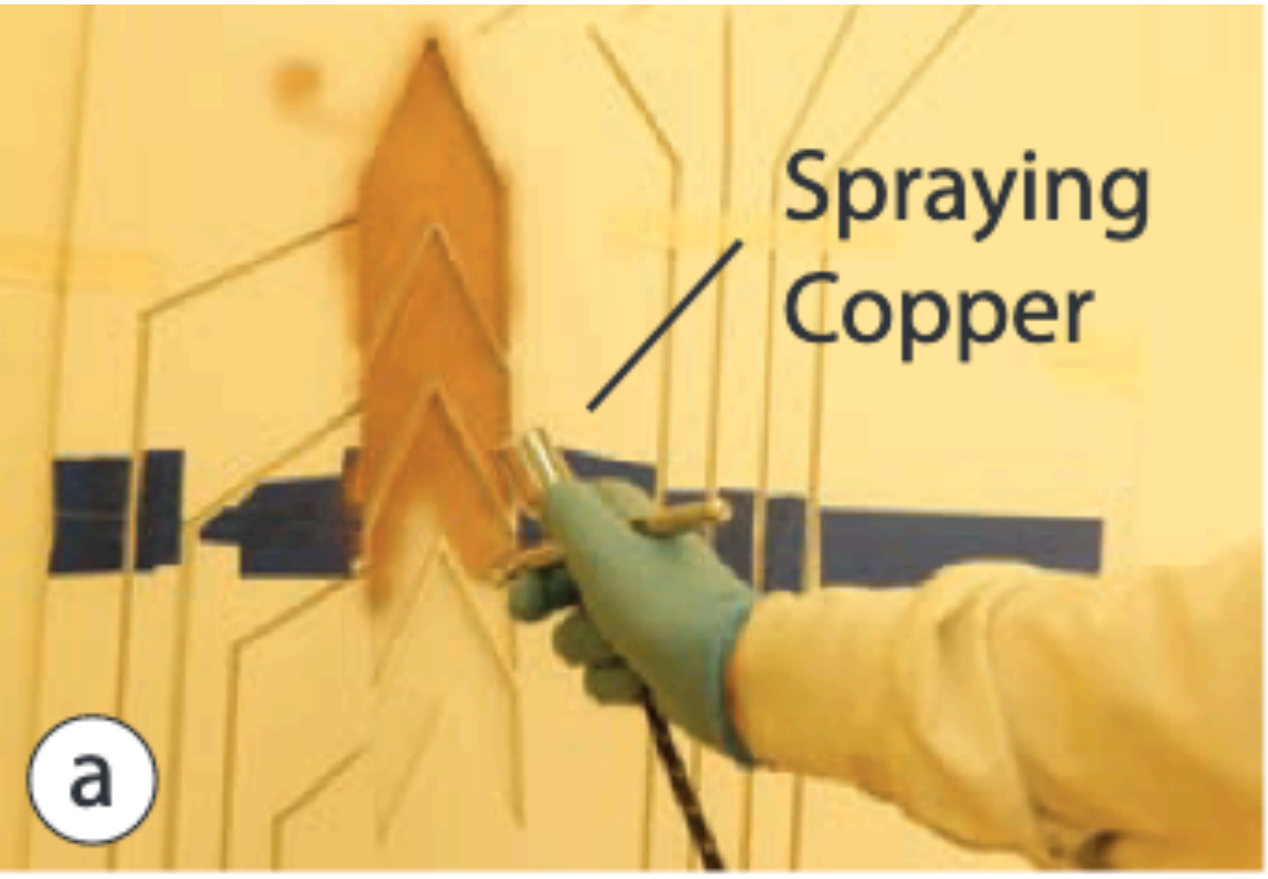

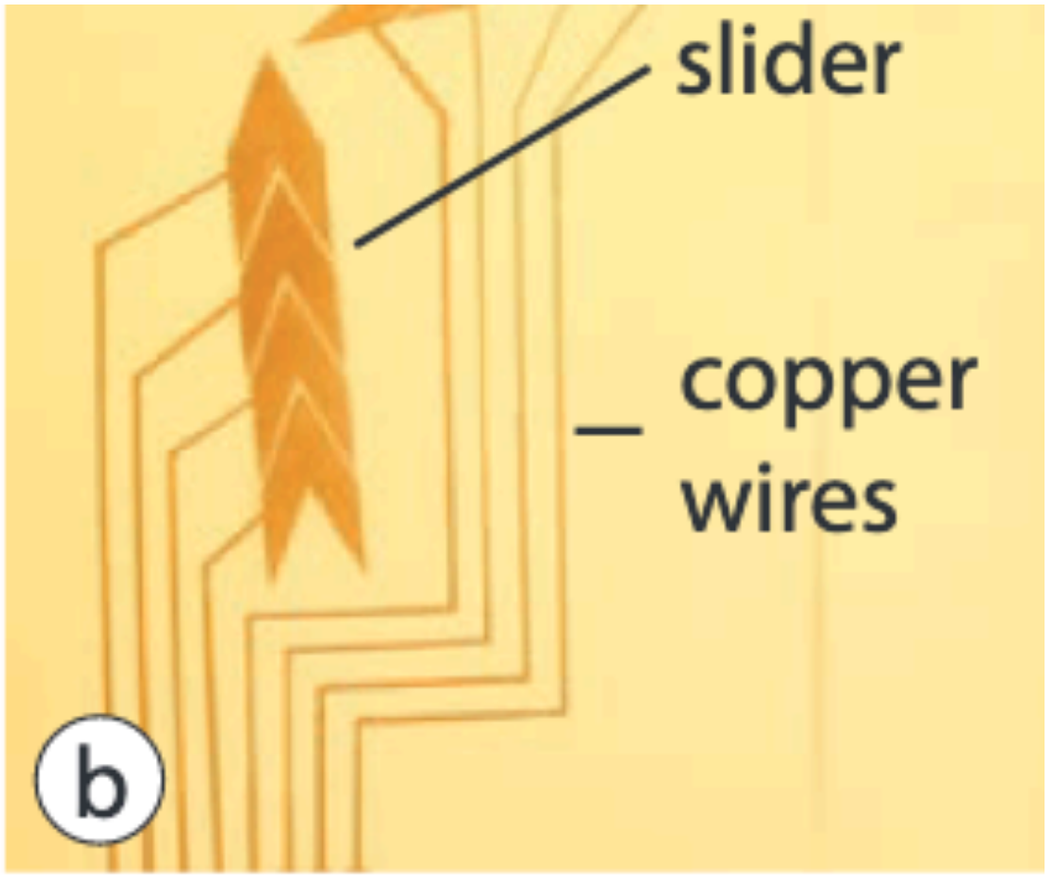

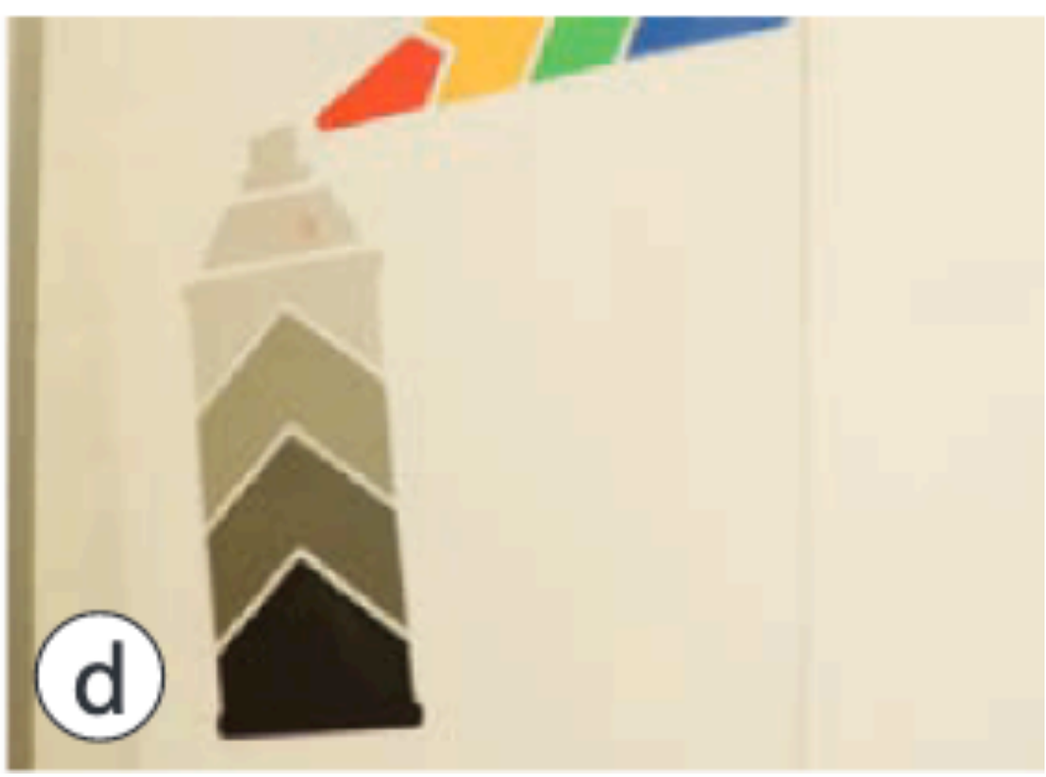

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3. Justin Burstyn, Nicholas Fellion, Paul Strohmeier, and Roel Vertegaal. PrintPut: Resistive and Capacitive Input Widgets for Interactive 3D Prints. In Proceedings of INTERACT 2015. Springer Berlin Heidelberg, 2015, 332--339.

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Michael Wessely, Theophanis Tsandilas, Wendy E. Mackay

UIST '18: Proceedings of the 31st Annual ACM Symposium on User Interface Software and Technology • October 2018, pp 127–139 • https://doi.org/10.1145/3242587.3242619

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Michal Piovarči, Michael Wessely, Michał Jagielski, Marc Alexa, Wojciech Matusik, +1

SCF '17: Proceedings of the 1st Annual ACM Symposium on Computational Fabrication • June 2017, Article No.: 1, pp 1–10 • https://doi.org/10.1145/3083157.3083162

The goal of display and screen manufacturers is to design devices or surfaces that maximize the perceived image quality, e.g., resolution, brightness, and color reproduction. Very often, a particular viewer location is not taken into account, and the ...

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Michael Wessely, Theophanis Tsandilas, Wendy E. Mackay

UIST '16: Proceedings of the 29th Annual Symposium on User Interface Software and Technology • October 2016, pp 697–704 • https://doi.org/10.1145/2984511.2984521

Recent advances in materials science research allow production of highly stretchable sensors and displays. Such technologies, however, are still not accessible to non-expert makers. We present a novel and inexpensive fabrication method for creating ...

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Simon Olberding, Michael Wessely, Jürgen Steimle

UIST '14: Proceedings of the 27th annual ACM symposium on User interface software and technology • October 2014, pp 281–290 • https://doi.org/10.1145/2642918.2647413

PrintScreen is an enabling technology for digital fabrication of customized flexible displays using thin-film

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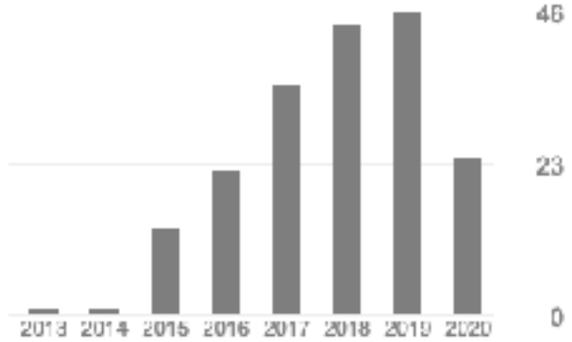

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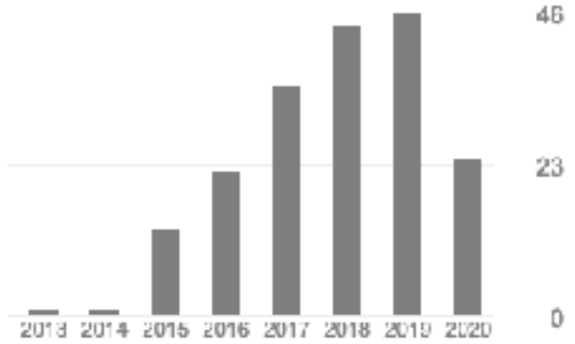

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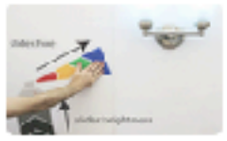

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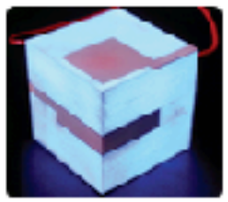

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SensorSnaps: Integrating Wireless Sensor Nodes into Fabric Snap Fasteners for Textile Interfaces

Artem Dementyev (Massachusetts Institute of Technology), Tomás Vega Gálvez (Massachusetts Institute of Technology), Alex Olwal (Google Inc.)

Tessutivo: Contextual Interactions on Interactive Fabrics with Inductive Sensing

Jun Gong (Dartmouth College), Yu Wu (University of Science and Technology of China & Dartmouth College), Lei Yan (Beijing University of Posts and Telecommunications & Dartmouth College), Teddy Seyed (University of Calgary), Xing Dong Yang (Dartmouth College)

3D Printed Fabric: Techniques for Design and 3D Weaving Programmable Textiles

Haruki Takahashi (Meiji University), Jeeeun Kim (Texas A&M University)

Knitting Skeletons: A Computer-Aided Design Tool for Shaping and Patterning of Knitted Garments

Alexandre Kaspar (Massachusetts Institute of Technology), Liane Makatura (Massachusetts Institute of Technology), Wojciech Matusik (Massachusetts Institute of Technology)

Technical Paper Session: Software and Hardware Development (North Ballroom)

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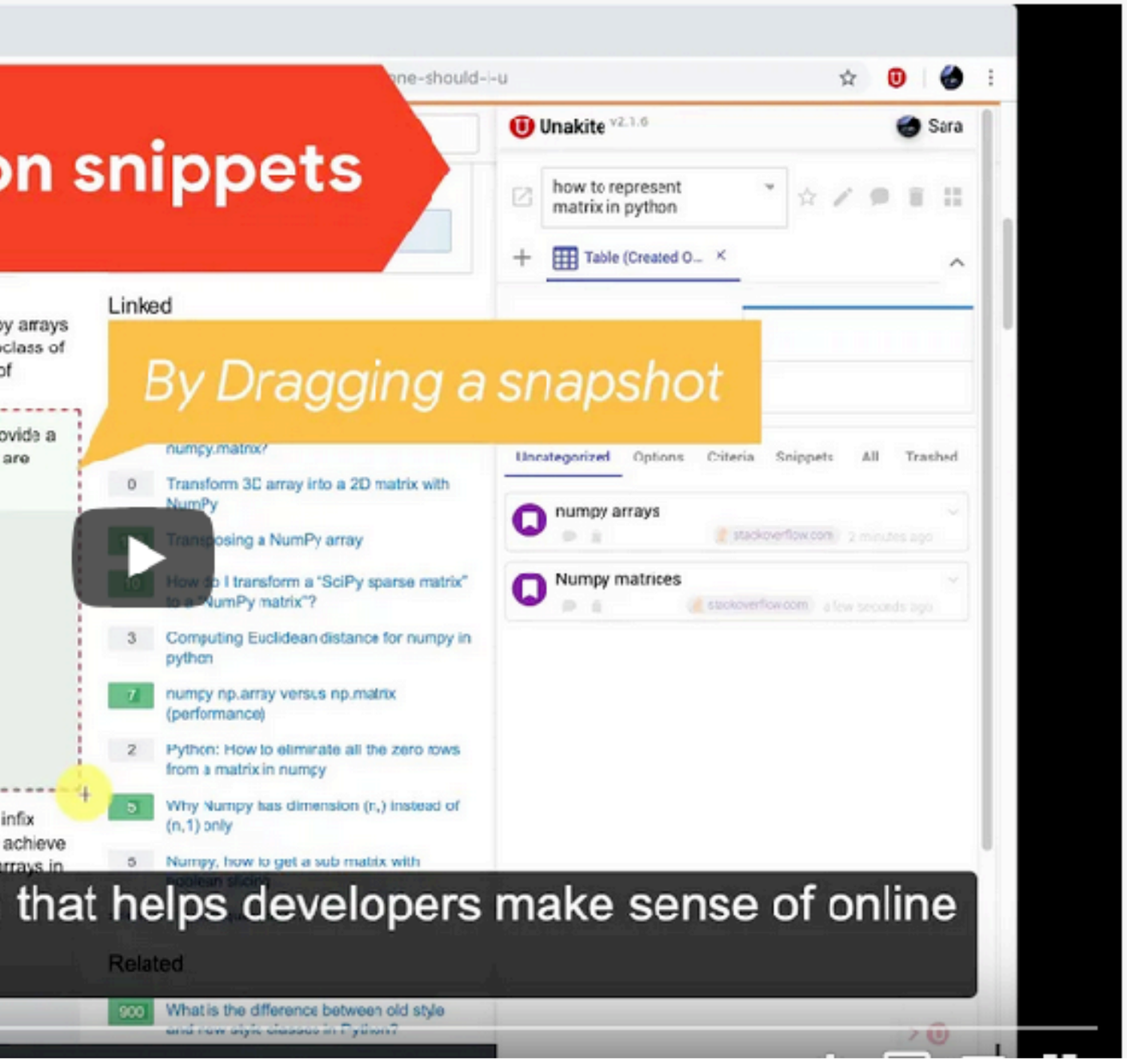
directly from the ACM DL so that they may capture usage statistics. However, if you are at the conference, we do have a digital master zip file
contact the proceedings (proceedings@uist.org) or registration chairs (registration@uist.org) for more information.

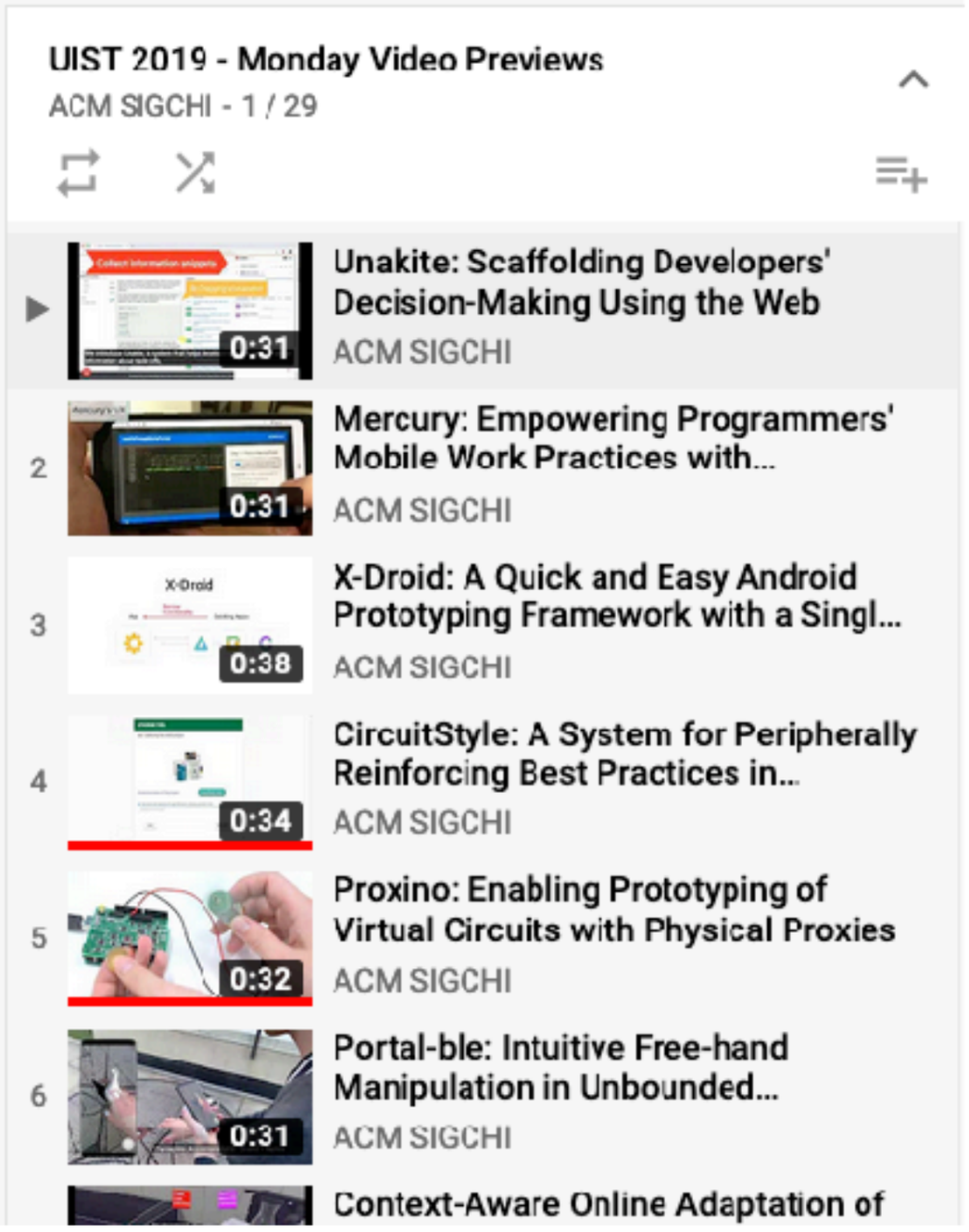
For a more detailed overview, you can schedule through Confer system, web app, and mobile apps (iOS/Android). **If the SIGCHI native app is
progressive web app that can be installed (added to home screen) and supports offline usage and login for custom schedule.**

Please check out the video previews of all papers on YouTube.

- Monday paper video previews
- Tuesday paper video previews
- Wednesday paper video previews
- Poster & demo video previews

or use the preview videos (30 sec each)!





other well-known HCI conferences:

- Computer Supported Cooperative Work (CSCW)
- Designing Interactive Systems (DIS)
- Creativity & Cognition (C&C)
- MobileHCI
- Ubiquitous computing (Ubicomp)
- Tangible and Embedded Interaction (TEI)
- Interactive Surfaces and Systems (ISS)
- Augmented Human (AH)
- Human-Robot Interaction (HRI)
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https://sigchi.org/conferences/upcoming-conferences/

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6.810 Engineering Interactive Technologies (fall 2020)

Homework: Find 5 Projects from ACM UIST 2018

Deadline (Sept 16, 2020, 1pm):

Fill out this Google Form.

Task

In this homework, you will go to the ACM UIST conference website and find your favorite five projects. You will then go into more detail with one of the five projects by reading the paper and reporting on the main contribution and technical implementation.

1) Go to the ACM UIST 2018 Conference Website

In particular, you want to go to the program schedule here.

end.