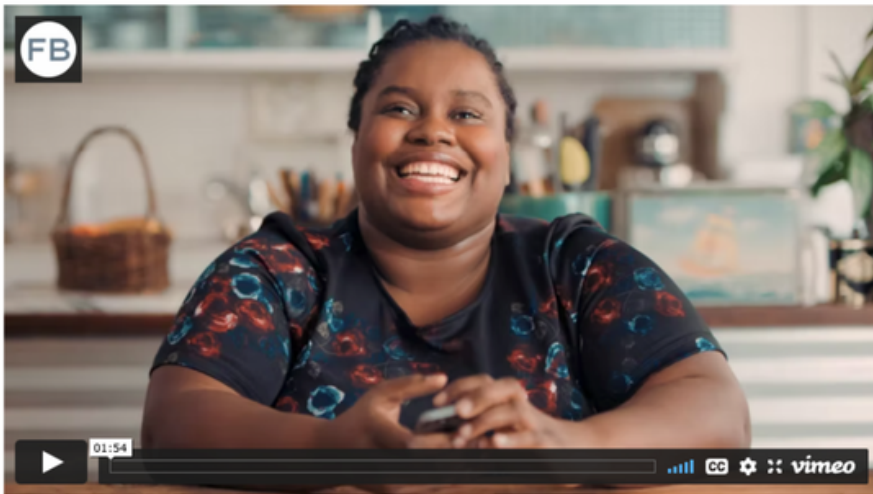# AI and the Empowerment of People with Disabilities

Shaomei Wu

Invited Talk
SheTek Conference Nov 3, 2022

Using Artificial Intelligence to Help Blind People 'See' Facebook

April 4, 2016

By _Shaomei Wu_, Software Engineer and _Hermes Pique_, Software Engineer on iOS and _Jeffrey Wieland_, Head of Accessibility
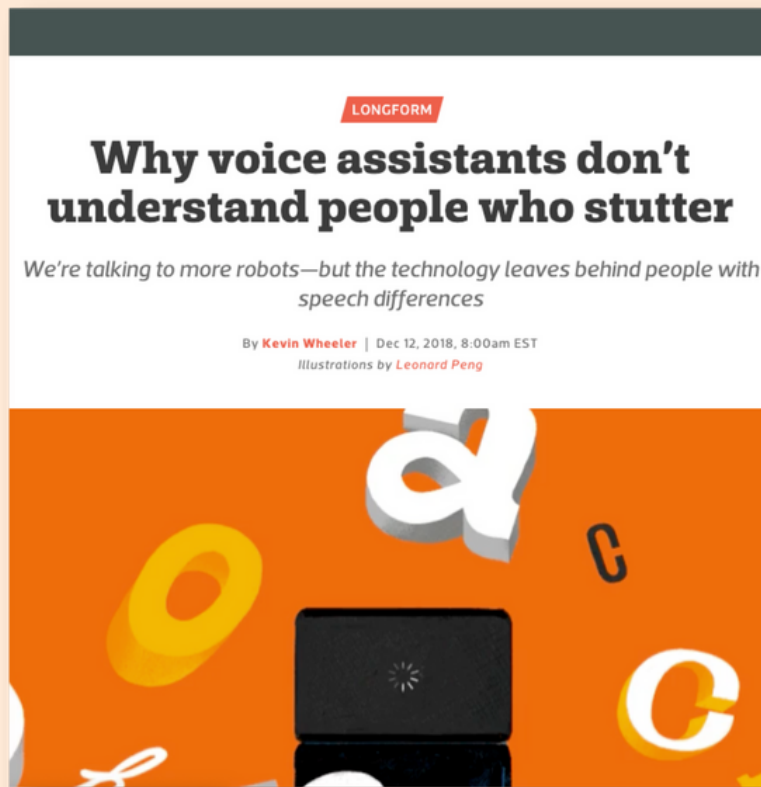
CADE METZ   BUSINESS   OCT 27, 2015 9:00 AM

Facebook's AI Can Caption Photos for the Blind on Its Own

Through the power of "deep learning," Facebook is figuring out how to make the social network accessible to nearly everyone.

That's me, back in 2015

Denied Services

LONGFORM

Why voice assistants don't understand people who stutter

We're talking to more robots—but the technology leaves behind people with speech differences

By **Kevin Wheeler** | Dec 12, 2018, 8:00am EST

Illustrations by *Leonard Peng*

Source: https://curbed.com/

I Stutter. This Is What You're Not Hearing.

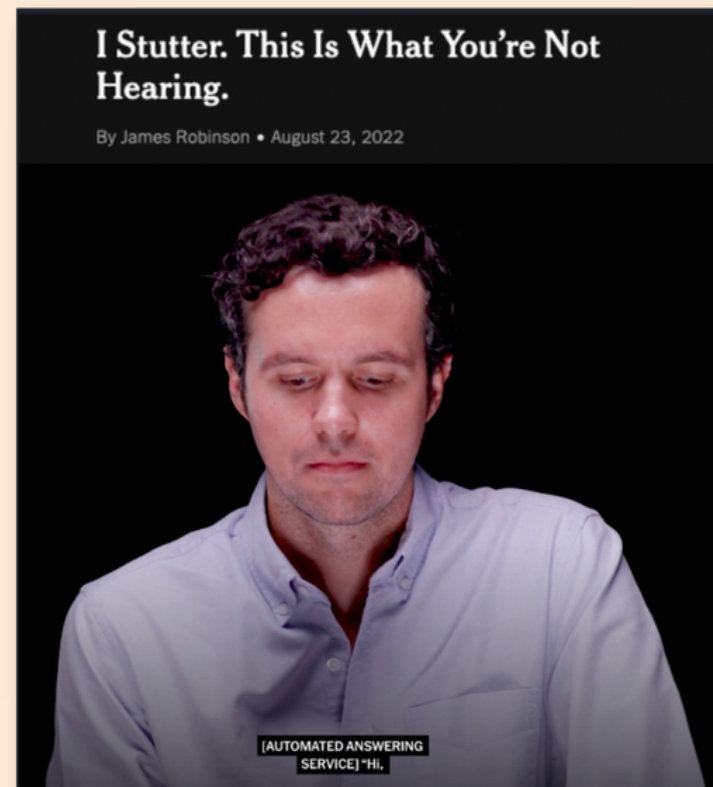By James Robinson • August 23, 2022

[AUTOMATED ANSWERING SERVICE] "Hi,

Image credit: NYTimes Opinion

Targeted Harm

Alice Wong
@DisVisibility

😒 "TikTok Admits It Suppressed Videos by Disabled, Queer, and Fat Creators

TikTok says that as part of an anti-bullying policy, it restricted videos that featured people whose bodies had "problems.""

slate.com/technology/201... via @slate

#TikTok #SuckItAbleism
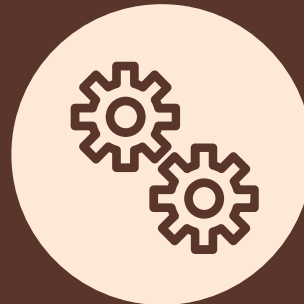
9:56 AM · Dec 5, 2019 · TweetDeck

144 Retweets   53 Quote Tweets   133 Likes

Meaningful Representation

Data

Method

Evaluation

We need a **new paradigm** for tech research, design and development that respect the goals, creativity, and agency of people who have been marginalized and oppressed.

COMMUNITY ORIENTED, NOT TECHNOLOGY ORIENTED.

We want a long-term, respectful relationship with the communities we partner with, through which the communities are involved from ideation to production.

BUILD FOR EMPOWERMENT, NOT ENGAGEMENT

We will not optimize for time spent or user growth, but design for long-term economic, emotional, and social wellbeing of the communities we work with.

EMPHASIZE INTERSECTIONALITY

We acknowledge the structural hierarchy within marginalized communities and prioritize the needs of those on the margin of the margins.

OPEN AND TRANSPARENT

We will publish all the research and open source our technical work to make them open and accessible to the communities we partner with.

AImpower.org Principles

Stuttering and Telecommunication

"On Zoom, your voice is so important for you to communicate than before. They can not see your body, your gestures. Your words carry more meaning. You have to impress people with your words. **For someone who stutters, videoconferencing is a disadvantage**."

Community research participant

The Hidden Costs of Videoconferencing for people who stutter

Videoconferencing technologies are NOT stutter friendly:

- Preset "**self-view**" in video calls puts people in direct confrontation with their stutter and makes them more self-conscious.
- Limited support for **non-verbal communication** (e.g. body-languages, eye contact) undermine people's current strategies for expressing themselves and connecting with audience.

People can still participate - but with **extra time, labor, and mental efforts** that make videoconferencing doubly exhausting.

Questions?

REACH US AT

contact@aimpower.org