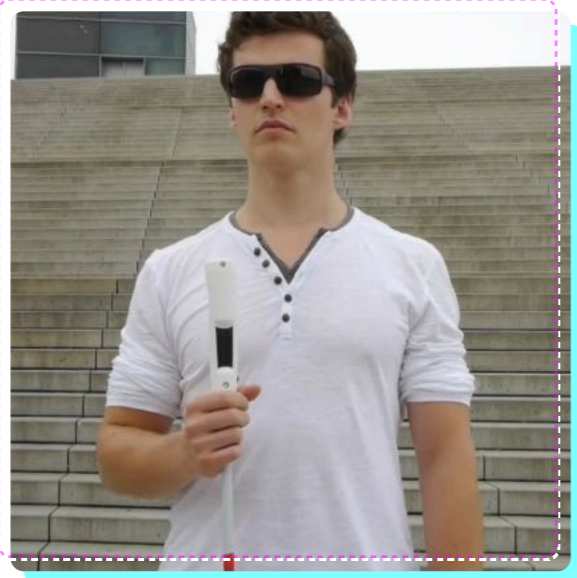*EMPOWERING*

Sonivivi

Sonivivi is a mobile app who helps people who are partially blind, or those who have a temporary reduction in eyesight. It helps users become more attuned to spactial audio, in order to orient themselves in 3D space.

What I appreciate about this project is that widens the scope of who we typically think of as vision impaired. Meaning, the target group is not fully blind people but those who have some sight, but need extra help.

It is impressive that Sonivivi was usable by someone with no previous touchscreen experience. I also like that it is self-paced and does not necessarily require a trainer to help orient the user.

Sonivivi on IxDA

EMPOWERING

Blindmaps.org

This is an interesting project, in that it starts with something blind people are already familiar with.

"The white can is the singlemost important tool for blind people to orient themselves and get feedback from the environment."

The cane handle gives haptic feedback as someone gets closer to a beacon. These could be placed throughout a home or place of business. Beacons also give contextual audio info. The haptics and audio feedback loop can even be used without a cane.

I could imagine this being beneficial for low vision users as well. It would be great in a museum setting for extra info.

Blindmaps on IxDA

OPTIMIZING

Wayfindr

I found the process by which they did design research to be fascinating. The above image is of vision blocking goggles, which allowed researchers to experience an urban commute as a fully blind person would.

It seems like an evolution of the concept from Blindmaps, in that navigation instructions are spoken to a user via their phone rather than on a beacon affixed to somewhere along their path.

This seems like a much more cost effective way of achieving a similar result. I like how it speaks the number of steps in a staircase to a user, for extra context. Of all the IXDA projects I evaluated this seems the most promising.

Wayfindr on IxDA

CONNECTING

Inclusive Toolkit

This project from Microsoft focuses on centering — in the collective consciousness of designers — the 1+ billion people in the world with disabilities.

There is an emphasis on those who are able bodied as being in a *temporary* state. In that, any one of us could find ourselves in a situation where we need extra assistance in day-to-day tasks.

MS created a set of iconography that includes wheelchair users, people with crutches, a broken arm, etc. It contains people with different hairstyles, hinting at different ethnic backgrounds.

Xbox is driving accessibility awareness for all its games.

Inclusive Toolkit on IxDA

DISRUPTING

U-Bot

U-Bot is an open source robot designed for blind children to orient to their environment.

The half spherical shape of robot itself somewhat resembles BB-8 from the Star Wars movies.

The robot can be paired with an app on a phone, which an provide controls to a third-party observer.

There are a series of games that children can play with the robot, including tossing a ball towards it, and helping it navigate through a series of cones.

These interactions help teach kids to rely on their sense of hearing, in order to discern where the robot is within a room.

U-Bot on IxDA

EMPOWERING

Nebula

Nebula is a haptic feedback belt worn around one's waist. It was designed with vision impaired people in mind. It is meant for those who find themselves in new or unfamiliar environments.

According to their findings, 30% of blind people never leave their homes alone. Not many blind people travel independently to unknown places.

"When travelling is more mentally demanding than positive emotional enjoyment... they stop going on adventures even with the desire for exploration."

Nebula aims to make travel more accessible, thereby making it more enjoyable for everyone.

Nebula on IxDA

Tiffany Chen

Tiffany created the Focus Orderer pluging for Figma, while she worked at Microsoft. It allows designers to annotate the flow through a screen, when a user presses the *tab* key.

This may seem like a small detail, but accessibility of all potentially shipping products is scrutinized at Microsoft. Each app must be usable via mouse and keyboard alike. By being able to have a Figma prototype more accurately reflect a real-world use case, the handoff between designers and developers is more concrete.

Though Tiffany has since moved on to another role, Microsoft still maintains this plugin and it is used within the company today.

Chris Pederick

Chris created the Web Developer plugin for Firefox, and then ported it to Chrome, Edge, and Opera. It personally saved me countless hours of debugging frustration, in the early days of Firefox.

The popularity of the plugin among front-end developers led to other tools such as Firebug.

Eventually, Firebug was absorbed and became a first-party citizen within Firefox. When browsers like Chrome debuted, they shipped with a built-in set of dev tools.

This is now par for the course with all modern browsers, but perhaps would not have begun if not for the seminal work of initial plugin authors like Chris.

Geri Coady

Geri is a designer and illustrator whose work focuses on visual accessibility. She is the author of Color Accessibility Workflows, a book that focuses on designing for everyone while still striving for an overall engaging aesthetic.

Her illustration work has been featured in A List Apart, and her clients include Google, Microsoft, and Craft CMS. She was voted .Net Magazine's designer of the year in 2014.

She is also fluent in Japanese and runs a side business called Geri Draws Japan, where she sells artwork and trinkets depicting aspects of Japanese culture. I admire the breadth and depth of her amazing skill set.

Sondre Kvam

Sondre created the Able plugin for Figma. It automatically compares the color contrast of two layers selected in Figma.

For example, a foreground text layer and background shape. It also allows a designer to simulate different types of color blindness within the app.

Additionally, Able will give a contrast ratio score — based on the WCAG accessibility guidelines — so that designers know how close (or far) they are from being in compliance.

Sondre has a BS in engineering and MS in industrial design from the Norwegian University of Science and Technology.

Sameera Kapila

Sameera is a senior product designer at Netlify. She was born in India, and raised on the Dutch island of Curaçao.

She received her MFA from Texas State, and has worked in varying capacities as a designer, front-end developer, and educator.

More recently, she wrote Inclusive Design Communities, wherein she shared the internal struggle of an someone with an international perspective learning and teaching a eurocentric curriculum.

She has since become a vocal champion for equity in design, thinking beyond our respective norms and purposefully seeking to include marginalized people.

Sam Mason de Caires

Same created the Figma plugin Color Blind, which allows one to simulate a design in different modes of color blindness. He was one of the first developers to try the Figma plugin architecture when it originally debuted.

His work was featured in an interview on the Figma site. When he worked as a UX engineer at Cloudflare, he was responsible for a major overhaul to their site and design system.

As part of that endeavor, he conducted an audit of all colors used across the site. He wrote about it in a blog post entitled thinking about color. I appreciate his analytical and methodical approach to design.