

2020

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Recommended Citation

Bose, Shagun and Strauch, Emma (2020) "AwARe: Eliminating Implicit Bias using AR," *Frameless*: Vol. 2 : Iss. 1 , Article 14.

Available at: <https://scholarworks.rit.edu/frameless/vol2/iss1/14>

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AwARe: Eliminating Implicit Bias using AR

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Abstract— Implicit Bias is something that happens to real people in real spaces all the time. But we can't see it. Since AR allows us to overlay virtual objects in real environments, we want to leverage this capability to make more salient the various ways in which people experience implicit bias and to realize empathy as a driver for pro-social behavior.

Keywords— Implicit Bias, Augmented Reality, Storytelling

Implicit bias refers to the attitudes or stereotypes we associate with others that affect our behaviors, actions and decisions without our conscious knowledge. We see examples of this in all realms and in all stages of life. For example, a study showed that when teachers in pre- school were asked to watch for troubling behaviors, they focused more on students of color than on white students (Gilliam, 2016).

Given how profound the impact of discriminatory behaviors is, there is no doubt that any institution - be it college or a workplace - could benefit from having its employees better understand implicit bias. The problem we noticed was that these trainings are often not as effective as one would hope.

Our goal is to create an experience using AR that is intriguing (such that people want to try it), helps people become more aware of implicit biases, and uses empathy as a driver for pro-social behavior.

I. PROPOSED SOLUTION

“The essential difference between emotion and reason is that reason leads to conclusions while emotion leads to action” - Donald Calne, Neurologist

Our project attempts to leverage marker-based AR and storytelling to elicit feelings of empathy and make bias more salient. Our proposed solution has three major components:

1. Marker based AR. We created flyers with image targets as markers which, when scanned, augmented a video player on top of that image. Our goal is to place these posters at strategic location where that form of bias is common. This interaction would then enable us to ground people's experiences in reality and make them salient.
2. Video Clips about individual experiences with implicit bias. We interviewed various studentson the University of Rochester campus

about their experiences with bias. Our goal is to use those interviews to create scripts about bias and then film videos with actors to depict them. These videos would then be playable through our AR Posters. This is inspired by the Make Some Room workshop created by the design team at Publicis Sapient which also relied on the power of storytelling to evoke empathy.

3. Call to action - Finally, we wanted to provide an action focused element that encouraged people to think about their role in preventing bias. To do this, at the end of every clip, we prompted users to 1) describe what they think the actor in the clip was feeling and 2) come up with an idea for what they could do to help.

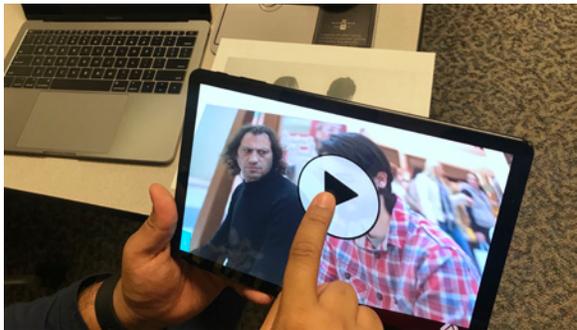


Fig. 1. A user using the application to watch a video during pilot study.

We chose AR for this project because it is more accessible and requires lesser hardware as compared VR. AR also allows the user to choose to have a more immersive experience that is overlaid on real spaces.

II. CONCLUSION

In conclusion, we think that through AR, our application has the potential to make an impact in society. By combining real interviews of people with an easy to use AR

interface, it serves a similar function as that of an art installation. Its goal is to make the viewer uncomfortable, to push them out of their comfort zone, and start a meaningful dialogue about social change.

III. ACKNOWLEDGMENTS

We wish to thank Dr. Zhen Bai, Assistant Professor of Computer Science, for her remarkable tutelage as supervisor of our project at the University of Rochester.

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