Diversity Statement

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As an immigrant, an international student, and as a person of color I strongly value the need for diversity, inclusion and equity in our workforce and educational programs. During my time at the University of Maryland and at the University of Washington, I was fortunate to interact with students from different underrepresented and under-served communities. These interactions helped me understand the hurdles they often face due to their race, ethnicity, religion, socio-economic conditions, disability status, sexual orientations and gender identities. This motivated me to advocate for students from these marginalized communities and perform outreach activities to encourage and increase their representation in higher education especially in STEM. As a faculty, I will devote my teaching, research and outreach services to foster a safe learning space and promote equity with diversity and inclusion.

I have focused on several outreach activities to encourage and advocate for students from the marginalised communities, and will continue to do so. In April 2021, I participated in a two day virtual grad school prep workshop\(^1\) conducted by the UW Reality Lab for students from underrepresented communities; see Figure 1. I gave a talk on my research and mentored four students, three from Historically Black Colleges and Universities (HBCUs) during these two days. Along with discussing technical aspects I discussed how to be involved in research as an undergrad and how to prepare for grad school. I pointed out the list of faculty members at their own institutions who are doing great research in CV\&ML and can potentially serve as their research mentors. In Fall 2021, I am serving as a mentor for a grad school application program\(^2\) conducted by the Queer in AI organization. As a faculty member, I plan to engage students from marginalized communities in the research activities of my lab from as early as high school. While many programs exist for high school students to engage in cutting edge research, they often end up serving private schools or public schools in high income areas. I will focus on connecting with high school students, especially from public schools in low income communities. I will offer them summer internships in my lab to provide them a greater exposure to higher education and research activities. I plan to take advantage of my department’s ongoing efforts in DEI and engage other faculty members to develop a summer internship program for high-school students. Partnering with organizations who advocate for these communities in tech, e.g., Girls Who Code, oSTEM, Queer in AI and Black in AI, will help in reaching out to a larger audience and their feedback will be extremely valuable.

As a future faculty, I envision to build a research group with diverse voices, outlooks, and population. Diversity in ideas, which often stems from diversity of people, helps in producing innovative and authentic research projects; encourages more collaborative and less competitive environment. I will especially focus on gender balance in my group by recruiting exceptional woman candidates, who are otherwise often underrepresented in grad school working on Computer Vision and Graphics. During my postdoc I advised one female PhD student and one female undergraduate. The low proportion of female students interested in Computer Vision and Graphics made me realize that as a faculty it will be important to reach out and make this area exciting and welcoming to new students. In Fall 2021, I organized two workshops to encourage undergrads at UW to join the Reality Lab as a research assistant, especially encouraging female students.

\(^1\)https://realitylab.uw.edu/components/graduate-prep-workshop.html
\(^2\)https://sites.google.com/view/queer-in-ai/graduate-school-application-programs
While recruiting graduate students I will put an emphasis on their individual experiences and the hardships they need to overcome than just judging them by their research and academic achievement.

As a researcher working at the intersection of Graphics and Vision we often end up inadvertently creating models that are biased. A diverse group of people working on a project can often better identify these biases, acknowledge and address them. For example, in our research work ‘Lifespan Age Transformation Synthesis’ we created two AI models for ‘male’ and ‘female’, mainly to handle the diversity in hairstyles and clothing reflected in the data, which ended up being limiting to non-binary individuals. We acknowledged these shortcomings, discussed the negative implications of our model on our GitHub page, and followup research works from the community addressed these shortcomings. As AI models are being increasingly applied on real-world without being cognizant of how it affects different communities, it is important to understand their diverse impacts while building them in a research lab.

As a teacher for both undergraduate and graduate level courses, I will design the curriculum cognizant of people from the marginalized communities. My aim will be to create a supportive and welcoming environment for all students. I will make sure all course lecture slides and materials contain closed captioning for hearing impaired students, and all images and videos contain alt texts for visually impaired students. The courses I teach will not require any additional purchase of hardware or software resources (e.g., GPU compute) to allow students from low income communities to have equal access. At the beginning of every course I will encourage the students to introduce themselves along with their personal gender pronouns. The course website will list relevant campus wide organizations for various underrepresented communities (e.g., LGBTQIA+ groups) and mental health resources. This will help the students be more aware of various resources and organizations that exists on campus. As a teaching assistant I included many of these initiatives (e.g., closed captioning and alt text, no additional resources, and personal gender pronouns) in my courses.

As a new faculty, as a researcher, and a teacher, I will continue my current efforts in promoting diversity, equity and inclusion. I will create a welcoming, respectful, collaborative and inclusive environment both in my class and lab group by promoting the values of diversity and equity.

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3 https://github.com/royorel/Lifespan_Age_Transformation_Synthesis#ethics--bias-statement