## **Diversity Statement**

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Diversity, equity, and inclusion (DEI) are important to further scientific progress by incorporating different perspectives and backgrounds into scientific discourse. It has been shown that diversity improves workplace productivity and the quality of work [1], and I believe that diversity is especially crucial for fair progress in artificial intelligence (AI), a field where biases in data or algorithms can have potentially detrimental effects on the scientific community as well as society at large.

A lack of diversity can result in thinking that can have negative, albeit often unintended, consequences. Examples of how homogeneous thinking can be actively harmful are commonplace in workplaces with low employee diversity. For example, when Apple first released its HealthKit app, the application enabled users to track their blood alcohol content, frequency of inhaler usage, and even sodium intake. However, the app could not track a menstrual cycle, a key use case for half of Apple's users [2]. This common use case would have likely been anticipated before launch had the HealthKit development team been more gender balanced.

In the field of AI, diversity is particularly important because otherwise harmful biases in the underlying data and algorithms can go unnoticed. For example, a recent version of Google's photo tagging software miscategorized Black people as gorillas [3]. While it is unlikely that the developers intentionally sought out this outcome, it was racist and offensive. Additionally, this oversight may have raised the accessibility barrier to AI for people of color, because it is the type of error that could make minorities feel unwelcome to the field. As AI algorithms become commonplace in the products and systems we rely on, it is imperative that the workforce that develops these algorithms is diverse.

While there has been progress in fostering diversity, equity, and inclusion in AI research, I believe we are still far from equilibrium and will require substantial effort to make education and research opportunities in AI and computer science more equitable. I am committed to increasing diversity in AI through (i) accessibility, which consists of exposing underrepresented demographics to STEM fields through outreach programs and educational events, (ii) close mentorship, which consists of proactively seeking out mentorship opportunities for underrepresented demographics, and (iii) supporting minority-led organizations.

Increasing accessibility: During my Ph.D. in physics at UChicago, I noticed that less than 10% of the students in our program were female or people of color. To increase accessibility to physics and STEM in general to less represented demographics, I volunteered as a teacher in UChicago's Science & Technology Outreach Mentoring Program (STOMP). STOMP organized after-school educational programs with a focus on STEM for middle and high-school students in the South side of Chicago, a region where people of color comprise the majority of the population. During this time, I had the pleasure of teaching curious students about various topics in science, such as star formation, making electric circuits, programming simple computer games, and photosynthesis. In the future, I plan to continue volunteering time to make AI more accessible to students and researchers from diverse backgrounds.

Diversity through mentorship: As a Postdoc at UC Berkeley, I focused on increasing diversity in AI through mentoring the next generation of AI researchers. According to a recent investigation into diversity in AI by Wired magazine and Element AI [4], an estimated 12% of leading machine learning researchers were women. For this reason, I proactively sought to mentor students from underrepresented backgrounds. During my postdoc, 50% (3 out of 6) of the students that I actively mentored were women, one of which is now a Research Engineer at DeepMind. In the future, I plan to continue proactively seeking mentorship opportunities that foster diversity.

Supporting minority-led organizations: Lastly, a simple way to increase diversity is by opting into relevant minority-led organizations and supporting their causes. For this reason, I joined the Black in Robotics ally program to support the cause of increasing the number of people of color in robotics. While I am not myself a person of color, I can help increase diversity by supporting minority-led organizations, and will continue to do so in the future.

<sup>\*</sup>https://mishalaskin.github.io/

## References

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