

### **Class Activity 1 (Algorithmic Bias and Fairness)**

In the past couple of years, Uber has been in the news because of their autonomous vehicle testing program in North America. After a 49-year old woman was struck and killed by one of its cars while crossing a Tempe, Arizona street, the company decided to halt this program. Discuss the moral responsibilities of various stakeholders involved in this incident: 1) Uber; 2) The driver behind the wheel; 3) The pedestrian; and 4) Lawmakers. Use the following two ethical theories – social contract theory and rule utilitarianism.

## **Class Activity 2 (Algorithmic Bias and Fairness)**

Based on a case study we discussed in this week's lecture, titled "Unequal Representation and Gender Stereotypes in Image Search Results for Occupations" by Kay et al, we learned the various biases that emerge from image search queries on topics like occupation. As a way to address this, what can Google do to audit their algorithms for bias? Based on this auditing, what could be possible strategies Google can adopt to remove this bias?

### **Class Activity 3 (Predictive Technologies)**

Reflect back on the other case study from this week's lecture, titled "Racial Discrimination in the Sharing Economy: Evidence from a Field Experiment" by Edelman et al. What the findings of this study tell us is that, perhaps Airbnb's design choices are one of the reasons why their algorithms are possibly inadvertently discriminating against specific racial and ethnic groups. It is true that, unlike hotels, identifying actual identities is essential to establish trust between hosts and guests. On the other hand, they probably need revision to address this bias, as this bias can eventually impact their business and profitability. Outline some design changes that Airbnb can pursue toward this issue.