# *ITAS 164 Lab 02 – Ethics*

**Part A – Ethics, Privacy and Information Security (1 hour to complete)**

This section is to be completed individually.

1. Read this case study from the Markkula Center of Applied Ethics: <https://www.scu.edu/ethics/focus-areas/internet-ethics/resources/diverse-faces-diverse-lenses/> and answer the 3 discussion questions at the bottom. **(15 marks)**

**Who are the stakeholders involved?**

1. **Individuals in the Dataset:** These are the people whose photos ended up in the dataset. In most cases, they didn't agree to this, which raises big concerns about their privacy and rights over personal data. This is an issue because their images were used without asking them first.
2. **IBM & Researchers:** IBM built this dataset. It’s widely used by researchers to enhance facial recognition tech. IBM plays a vital role in how this data is gathered and used, and so do the researchers who rely on it. They're responsible for developing these technologies, but they also have to think about the ethics and responsibility that come with using personal data like this.
3. **General Public:** The society as a whole is affected by facial recognition technology in some way. They are concerned with being watched, keeping their personal lives private, and how AI is used in public places for monitoring.
4. **The Goverment:** The government is in charge of making sure data protection, privacy, and that AI tech is handled the right way. They set policies, rules and keeping an eye on how personal data is used and how facial recognition, is developed and applied. Their role is super important in balancing innovation with the need to protect people's rights.
5. **Minority Communities:** The minority groups who often get misjudged with AI systems, like in facial recognition. These systems can lead to wrong identification more frequently for these groups. It’s not just about technology getting it wrong - but rather it affects their basic rights and freedoms. All this can have real negative effects on people's lives.

**How might the development and deployment of this database be evaluated through the ethical lenses of rights, justice/fairness, utilitarianism, common good, and virtue ethics?**

1. **Rights:** This lens shows individual rights, with a big focus on privacy and consent. Using someone's image without asking them contests their privacy rights. People should always have a say over their personal data. People's control over their own information is a basic right.
2. **Justice/Fairness:** This lens looks at who gains and who loses in the situation. Even though the database was created to make facial recognition work better for different people. It also originated other issues about whether it's fair to use people's data without asking them. For making AI fair, we also need to think about being fair to the people whose information we use. Improving technology should not be at the expense of people’s data.
3. **Utilitarianism:** This lens focuses on connecting actions with the results, aiming for the most benefit on a general level. This database had it’s primary goal to improve AI accuracy. This could be a plus for society. However, there's the risk that this tech could be misused on a mass level in case of a breach. Hence, these things should be developed keeping in mind the fine line between the broader benefits and the potential downsides for individuals.
4. **Common Good:** When we try to focus onimproving AI accuracy, it's seen as a positive for the common good because it leads to a fairer technology for all. One big thing here is how the data is collected. Also keeping in mind that this tech could be used in the wrong way might hurt public trust and how well people get along in society.
5. **Virtue Ethics:** Moral character and virtues. Via this lens, the main focus should be on getting informed consent, respecting people's privacy, and being transparent about how they're doing things and what they're planning to do. This focuses more on the positive impact and not what is technically or legally possible. IBM and other companies should make sure that their work is not just effective, but also ethically sound.

**In this project, what moral values are potentially conflicting with each other? Are there ways to reconcile them, or to respect all relevant interests/values? If so, how?**

**Privacy and Tech:** On one side, there are people's right to keep their lives private. On the other, there’s an intent to make facial recognition technology better. The IBM DiF project is trying to make AI accurate, but this might come at the cost of people's privacy. This is a primary conflict.

**Fair AI vs. Data Collection Methods:** IBM intended on building an accurate AI that's fair and has no biases. But the method of collecting data (from flicker) needs to be ethical and respectful of individual rights. It wasn’t made easy for the flicker users to delete their data without going through hoops. The intent and the data collection means go against each other here.

**Below are some of the ways to reconcile them:**

For the IBM DiF project, a new or modified approach is needed. *Transparent communication* about the project's *goals and methods* is needed. This is for those whose data might be used. Also, developing thoughtful consent strategies for large datasets is needed. *Opting out* of this should be easy. Engaging with the public and policymakers to create certain guidelines for AI data use is also needed. Lastly, there should be *periodic or ongoing evaluations*. This is to make sure that the project remains true to the societal values.

1. **In your opinion, how should the department handle the ethical issues of: (15 marks)**
   1. **Two programming assignments handed in that are identical. What if there are two others that changed variable and function names? (2 different situations here…one where code is identical and one where functionality is identical but different variables, functions, etc).**

Let us discuss these one by one.

First, **the programming assingments being identitcal**, This is a clear case of academic dishonesty. In this case, plagiarism policies should be in place - with clear messaging that copying code is never okay. Consequences here should range from the standard (assignment rejection) to the more significant academic penalties in cases of multiple offences.

Second, **Altered Variable and Function Names**, Similar to the first one, but this is a more deceitful way of handling the issue. Anyone can open VSCode and select variable and or functions and replace them after using someone else’s code. This should also be stated in the plagiarism policy. Again, consequences here should range from the standard (assignment rejection) to the more significant academic penalties in cases of multiple offences.   
  
One thing to note in the second scenario is that, based on the complexity of code, sometimes changing the variable/function names can be a more difficult task than rebuilding the program from scratch. There is less incentive for the students to do so. It also shows basic understanding of the code. If the student is able to display the ability to do this, they can be marked or passed with a low grade which is notably a punishment in itself.

* 1. **The use of open source / publicly available code/solutions in assignments.**

Open source resources and materials openly available on the web can be incredibly beneficial as educational tools. But it is equally or even more important to teach students what it means to use these kind of resources.

This includes understanding licensing agreement: understanding the code they’re using and what it means. In general treating it as resources that should be used to learn from and understand, not just as something to replicate.

Instead, assignments might be designed in such a way as to allow students to use open-source code, but to require them to document and explain their use of it - therefore, demonstrating their understanding of the material.

* 1. **Using code generated by ChatGPT or Copilot or others to generate code for an assignment and not accrediting the source of the finding.**

The quick rise of AI that code like ChatGPT or Copilot raises more ethical considerations, especially when using it and claiming the generated code as own. In such cases, a set policy telling students when and how they can use such tools that allows them to use them to improve learning. Some teachers believe that AI makes good developers faster and bad developers become good developers by finding bugs and learning faster, on the other hand, some teachers are totally against using it. Same goes for the students. There needs to be multiple polls to come up with a high level policy. It should also include that students are required to demonstrate and declare in some way that this is what the are doing.

**Marking Scheme**

|  | Marks |
| --- | --- |
| Part A - Question 1 | 15 |
| Part A - Question 2 | 15 |
| Part B - Question 1 – Ethical Scenarios | 15 |
| Part B – In Class debate participation | 10 |
| Total | **55** |

**To submit**

The following file should be uploaded to Moodle:

* YourInitials\_164L02\_Ethics

**Appendix: Axon Case Study**



