United Nations
Educational, Scientific and
Cultural Organization

A SURVEY OF STAKEHOLDERS ABOUT

AI ETHICS IN NEPAL

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27 MARCH 2022

Outline

Introduction and Motivation

Survey Findings

Limitations of the Project

Main Takeaways

Recommendation and Future Work

Introduction and Motivation

What is AI Ethics ?

AI Ethics is a way of formalizing the implications and impacts of AI algorithms.

AI Ethics work can take different forms:

- Building AI to solve ethical problems
- Highlighting problems with existing AI technologies
- Building technology to solve existing problems in AI
- Advocating for better policies
- and many more ...

AI Ethics Globally

- **Transparency**
- **Justice and Fairness**
- **Do no Harm**
- **Accoun - tability**
- **Privacy**

Problem Areas

- AI Discrimination
- Lack of explainability
- Labor exploitation
- Loss of Privacy
- Misinformation

Who is involved ?

- Government
- AI experts
- Digital activists
- Journalists
- International and civic orgs

Why this Project?

Ethical principles **highly contextual.**

Lack of policies and guidelines related to AI development and use.

No public information about AI practices in Nepal.

Aspirational relationship with AI

Existing social inequalities and digital divide.

Lack of active research / third party ecosystem to keep **technology practice accountable**.

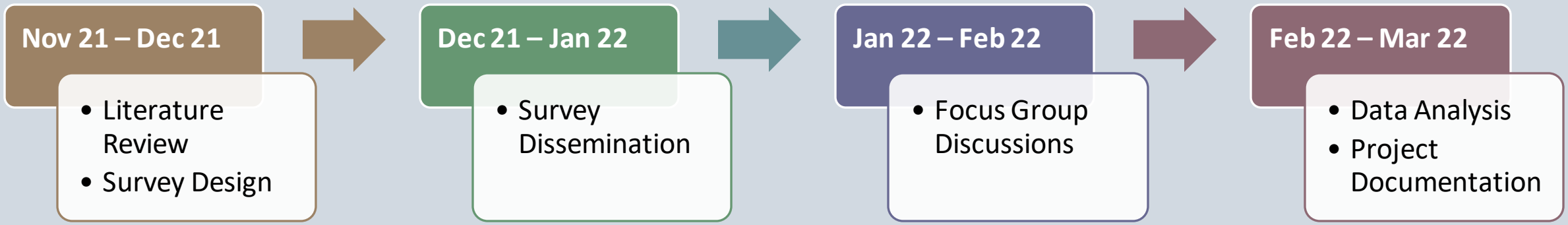
Project Goals

Create an **informational resource** on understandings and current practices in Nepal.

Identify **shared concerns and conflicting opinions** among surveyed stakeholders.

Use insights to **spark discussions.**

In the long run, help **contextualize responsible AI practices** for Nepali society.

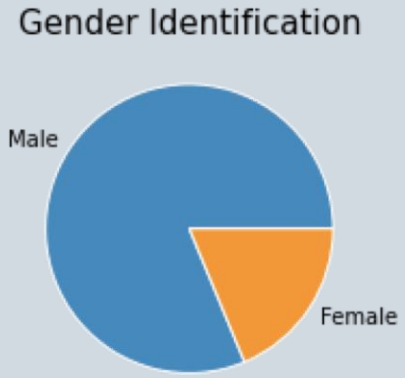


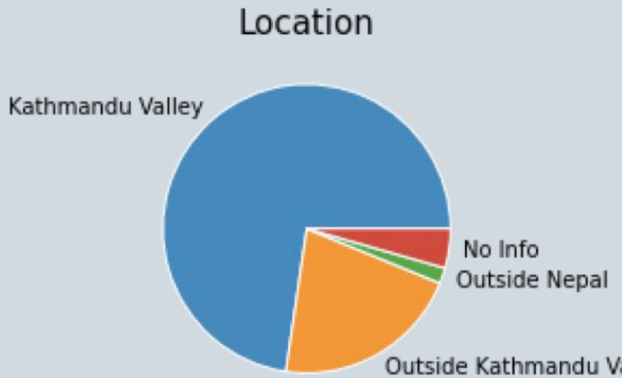
Project Timeline

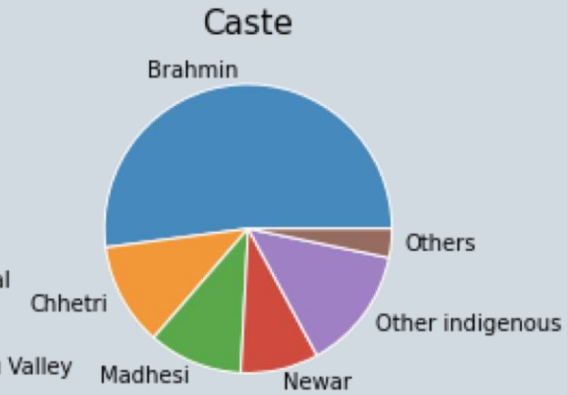
Survey Findings

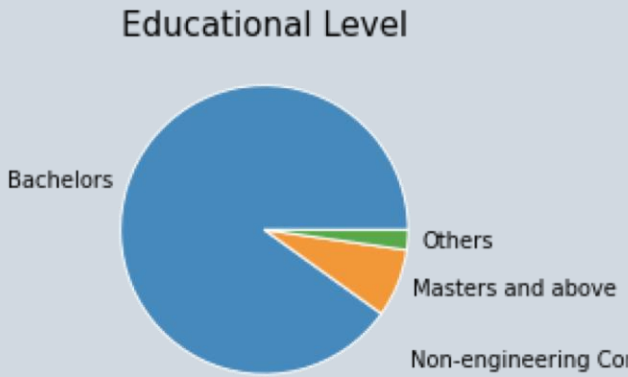
Who Partcipated ?

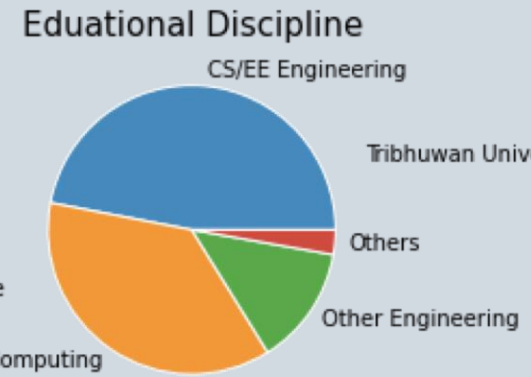
- 217 Students
- 51 Professionals
- 11 Policymakers

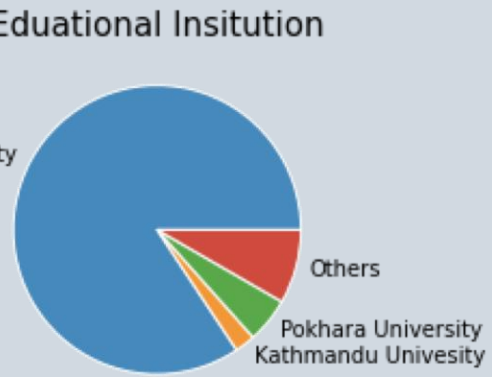




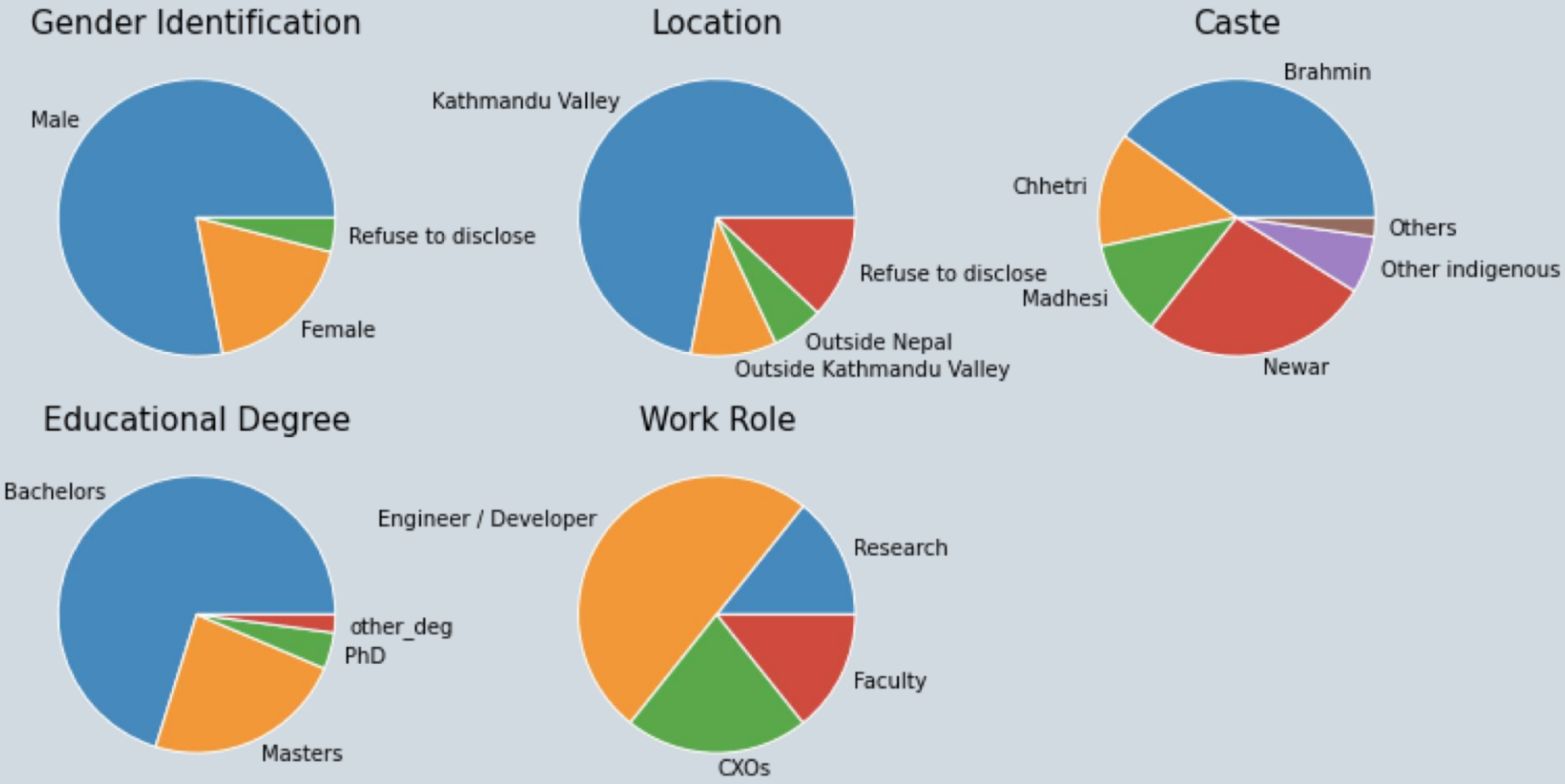








Demographic Distribution: Students



Demographic Distribution : Professionals

AI Ethics in Nepal

Is AI ethics a topic of concern in Nepal ?

What are the key concerns ?

How do different stakeholders see their roles ?

STUDENTS

85 % said AI Ethics is a topic of concern for Nepal.

48 % said AI ethics issues are different for developing vs developed countries.

72 % said data bias to be most important ethical issue in Nepal.

Key Concerns:

- Lack of AI skills
- Lack of infrastructure
- Lack of AI policy
- Lack of good governance

PROFESSIONALS

90 % said AI Ethics is a topic of concern for Nepal.

66% said data bias to be most important ethical issue in Nepal.

34 % considered themselves responsible for ensuring ethical AI.

Key Concerns:

- Data Privacy violations
- Lack of AI literacy
- Lack of technical accuracy of AI
- Potential for misuse of AI

POLICYMAKERS

90 % said AI Ethics is a topic of concern for Nepal.

90 % wanted to learn more about AI and AI ethics.

81 % said Nepal currently does not have good policies for responsible AI.

Key Concerns:

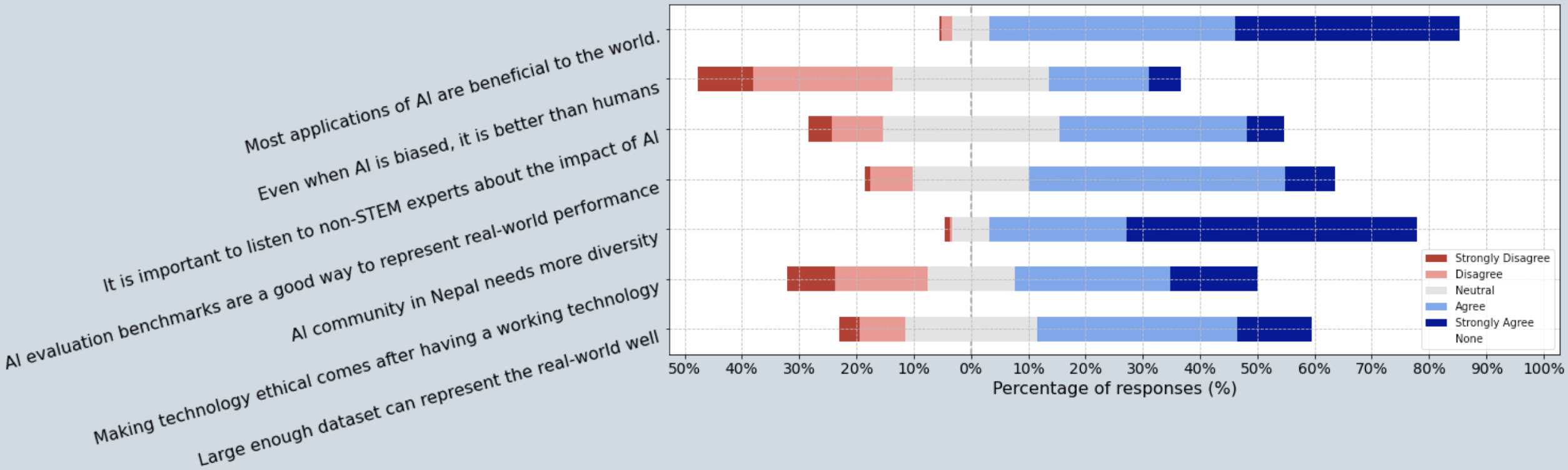
- Lack of awareness
- Lack of techncial competence
- Winner take all potential of AI
- Majority might get left behind

Impressions of AI

What do the respondents think about AI's benefits and risks ?

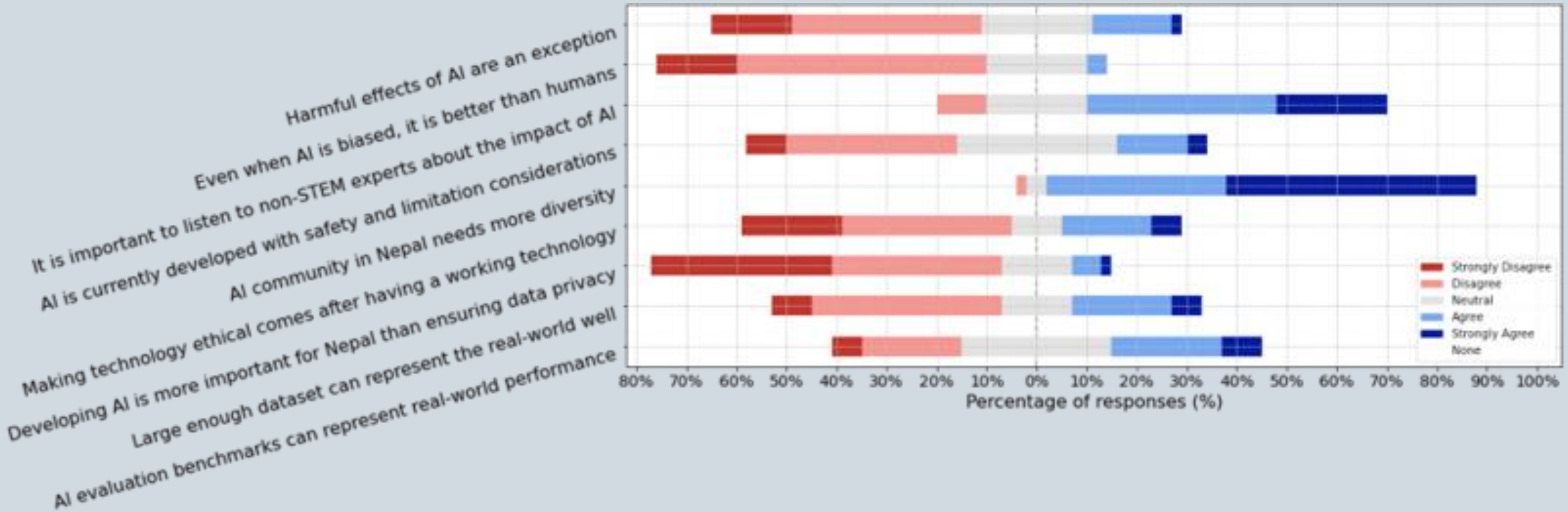
Do the different respondents have similar opinions ?

Do they understand limitations in current technology and practice ?



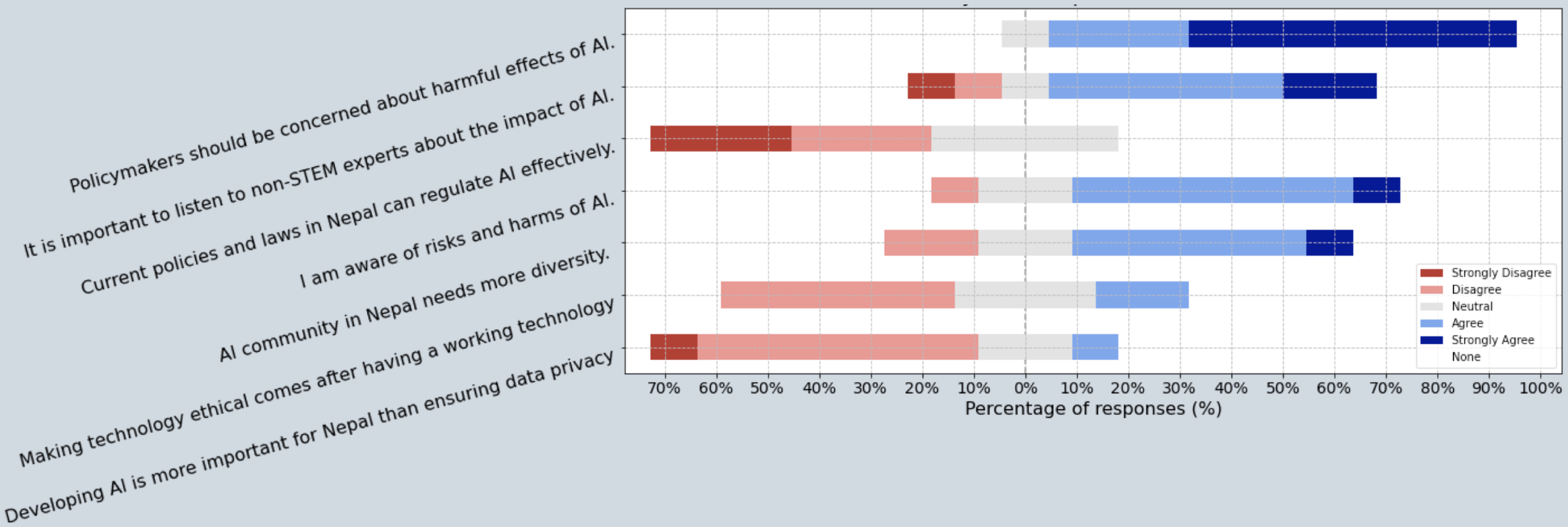
STUDENTS

Generally optimistic about AI and less concerned about its potential harms.



PROFESSIONALS

More aware of potential harms and technical limitations of AI.



POLICYMAKERS

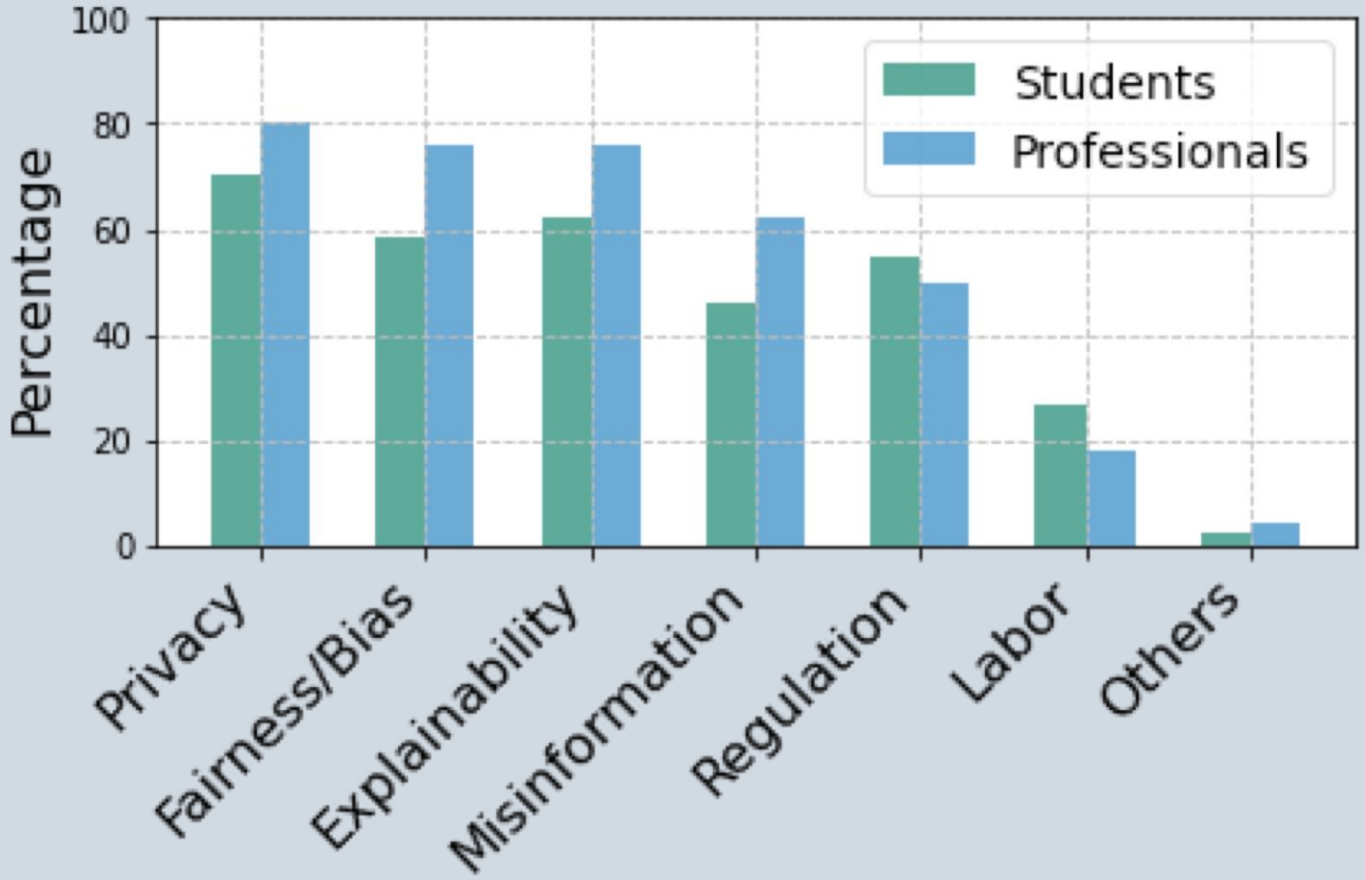
Somewhat cautious about AI and aware of the need for responsible policy in Nepal.

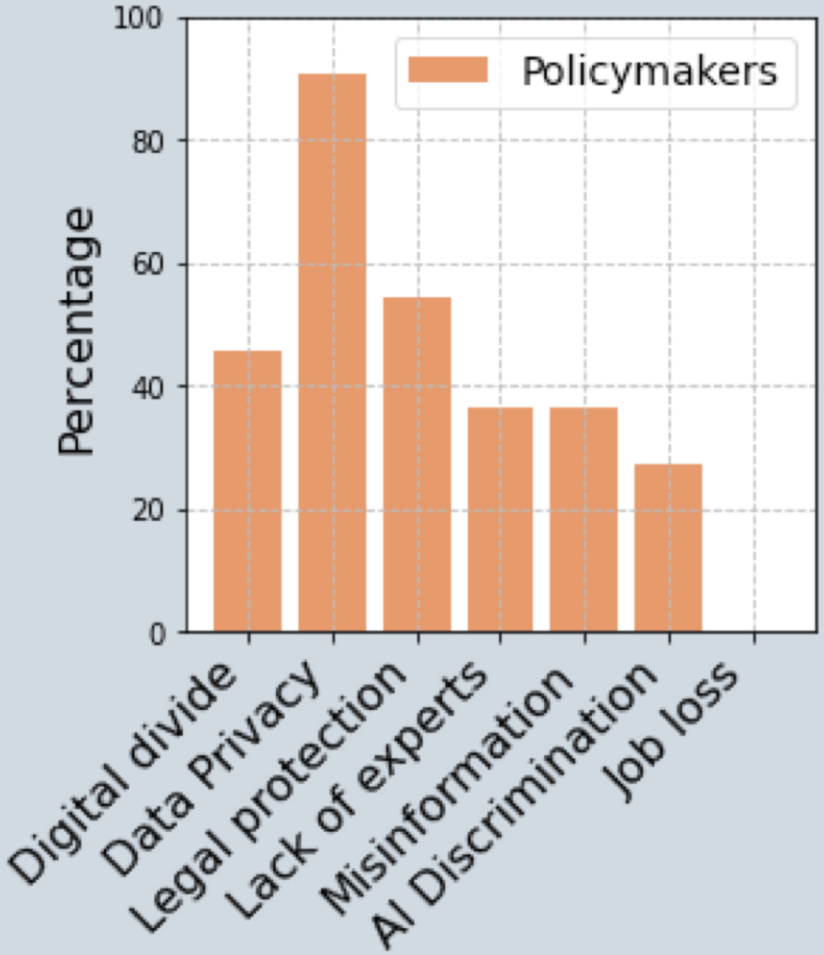
Creating Ethical AI

What are the most important topics ?

Who is responsible ?

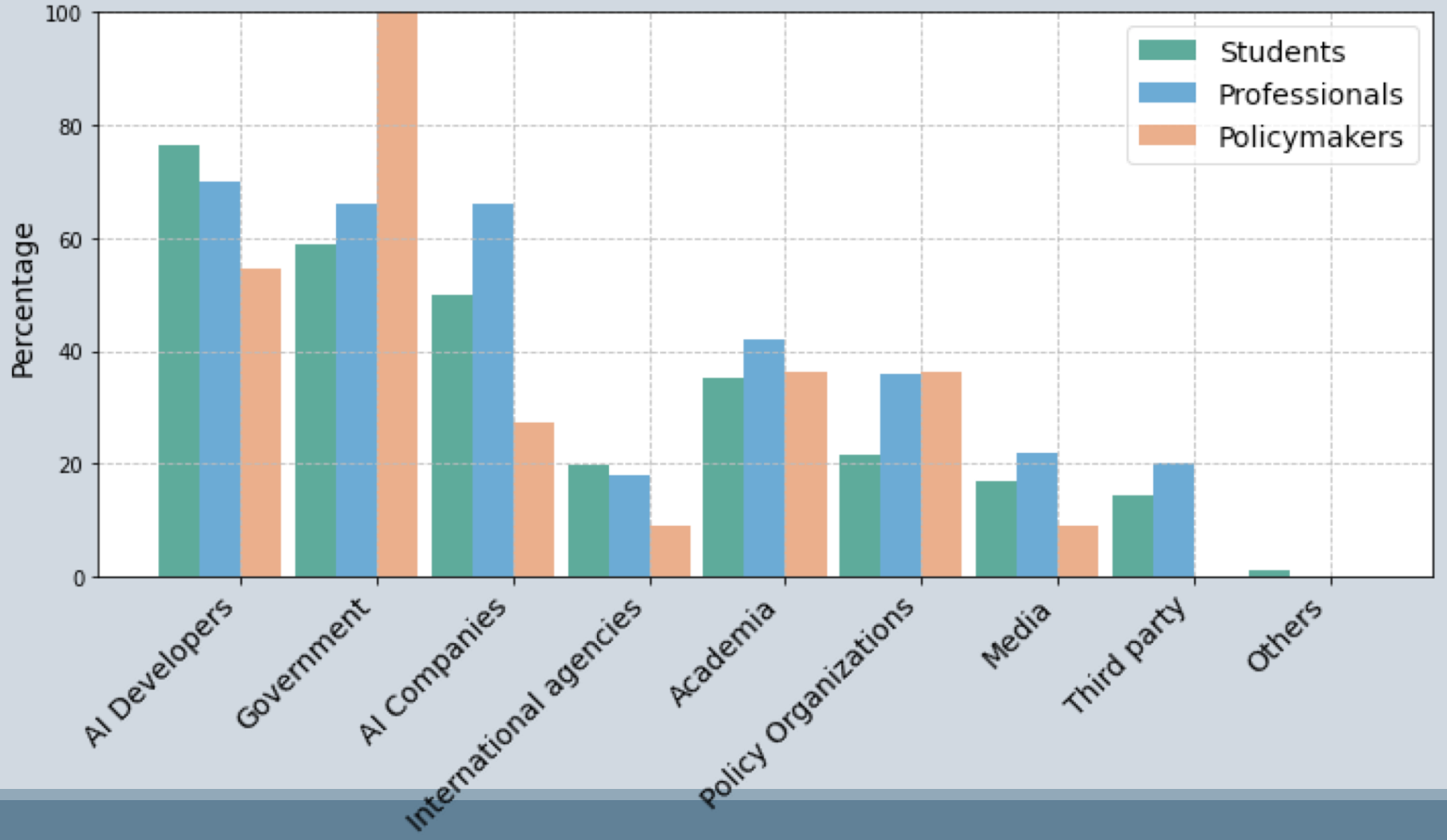
What are the best ways to ensure ethical AI ?





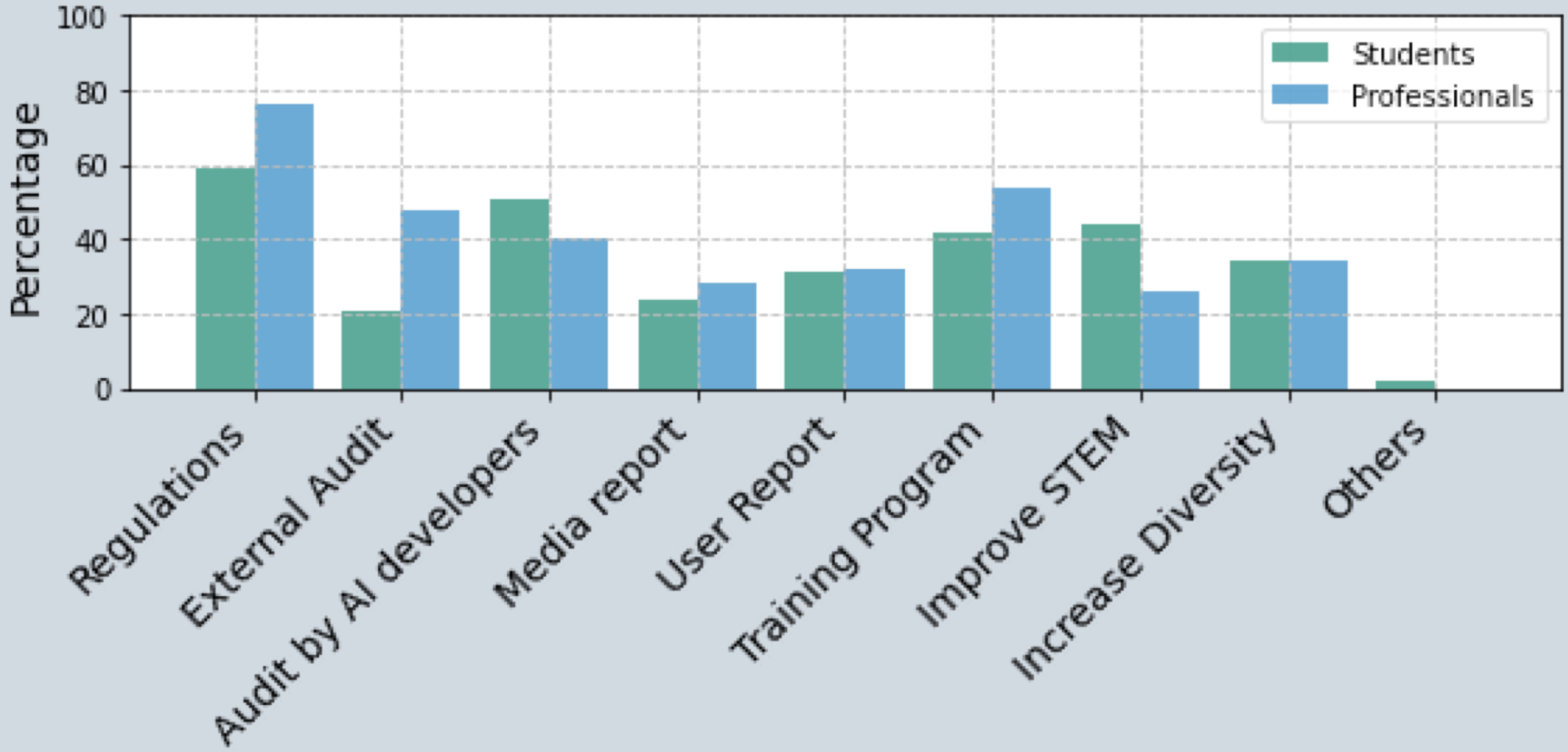
Most Important Topic

- Data Privacy is an important concern.
- Most respondents not concerned about job loss.



Who is responsible ?

- Policymakers think government as more responsible than others.
- Most respondents did not think media or third party as responsible.

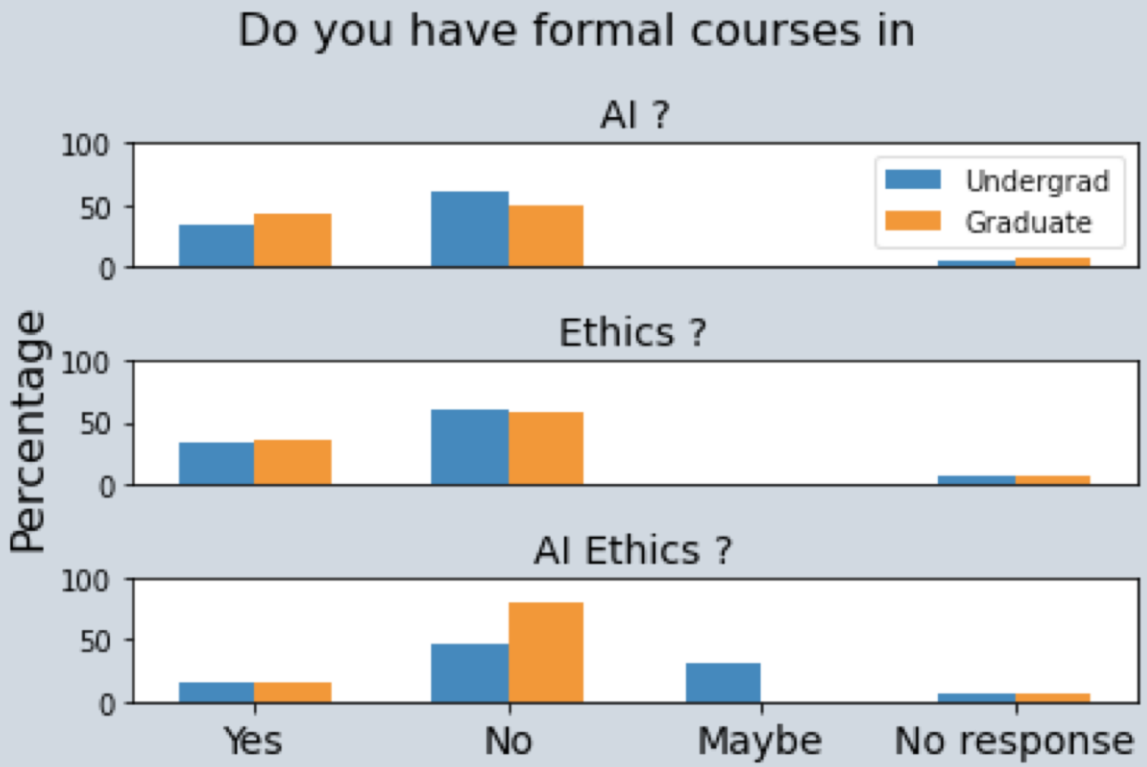


Ways to ensure ethical AI

- Regulations and audits as the most effective ways.
- Students and professionals differed in who should be auditing AI.

AI Ethics and Education

- Is AI education relevant and sufficient?
- Is AI ethics part of curriculum ?
- Does education impact responses ?



Where do you learn about AI ethics ?

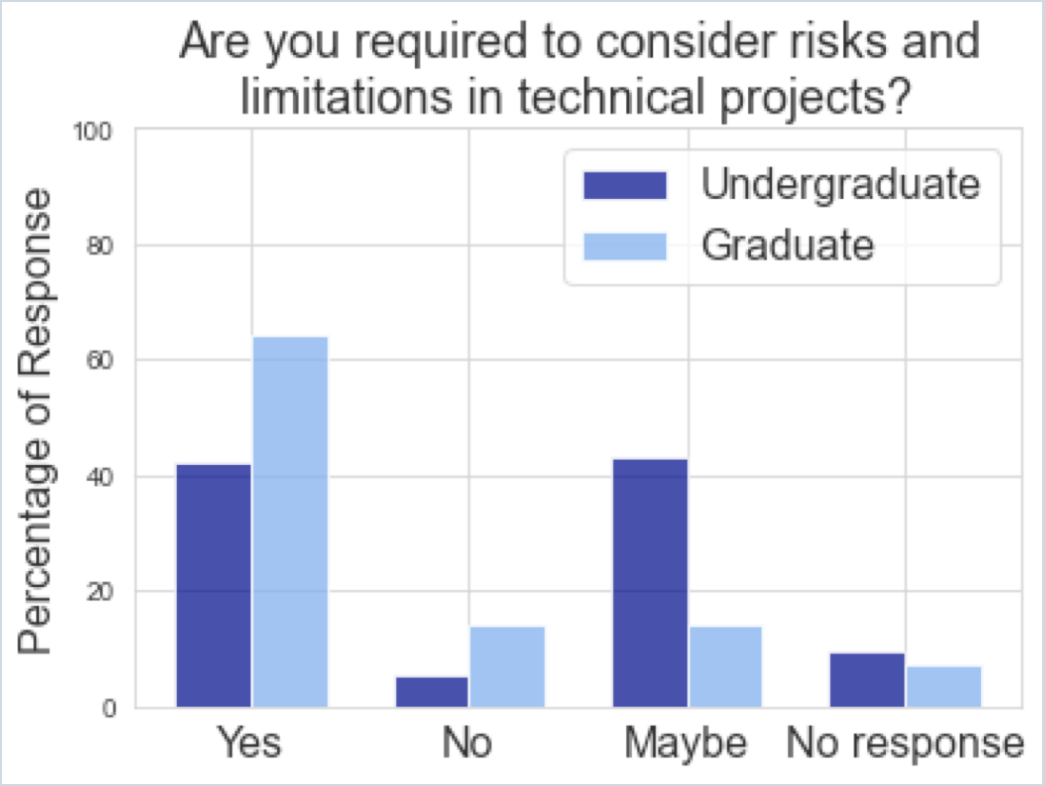
Social media, Blogs, and Research papers

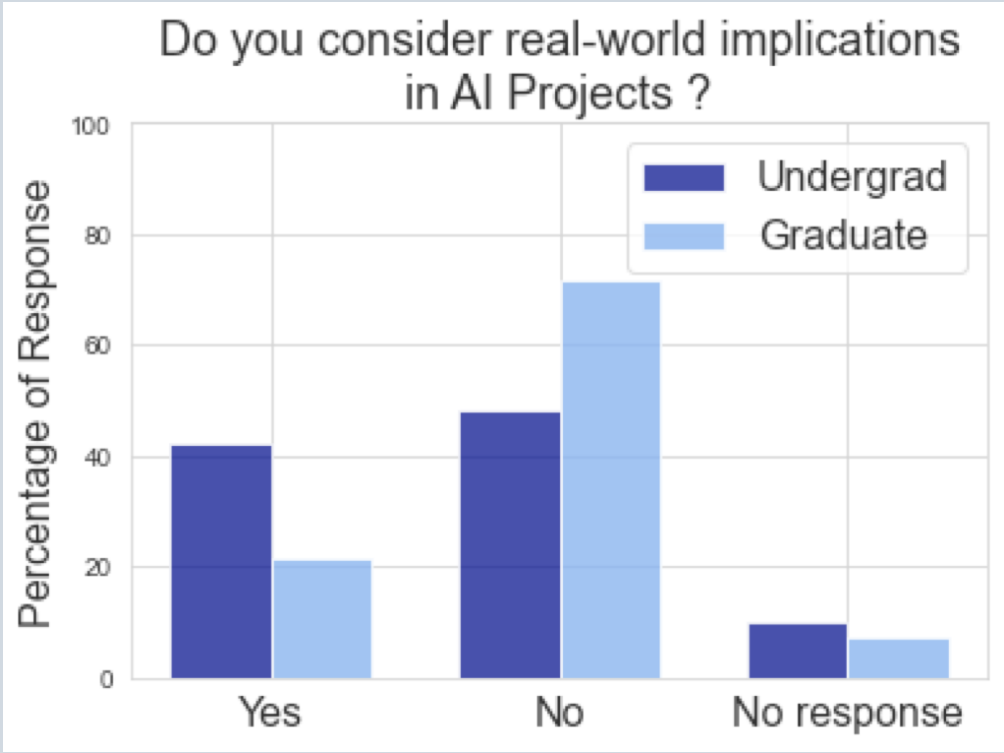
Who do you follow about AI ethics ?

Elon Musk, Andrew Ng, Lex Friedman, Timnit Gebru

AI Ethics Information

- No formal education on AI ethics.
- Information from AI entrepreneurs and researchers.





Real-world Impact

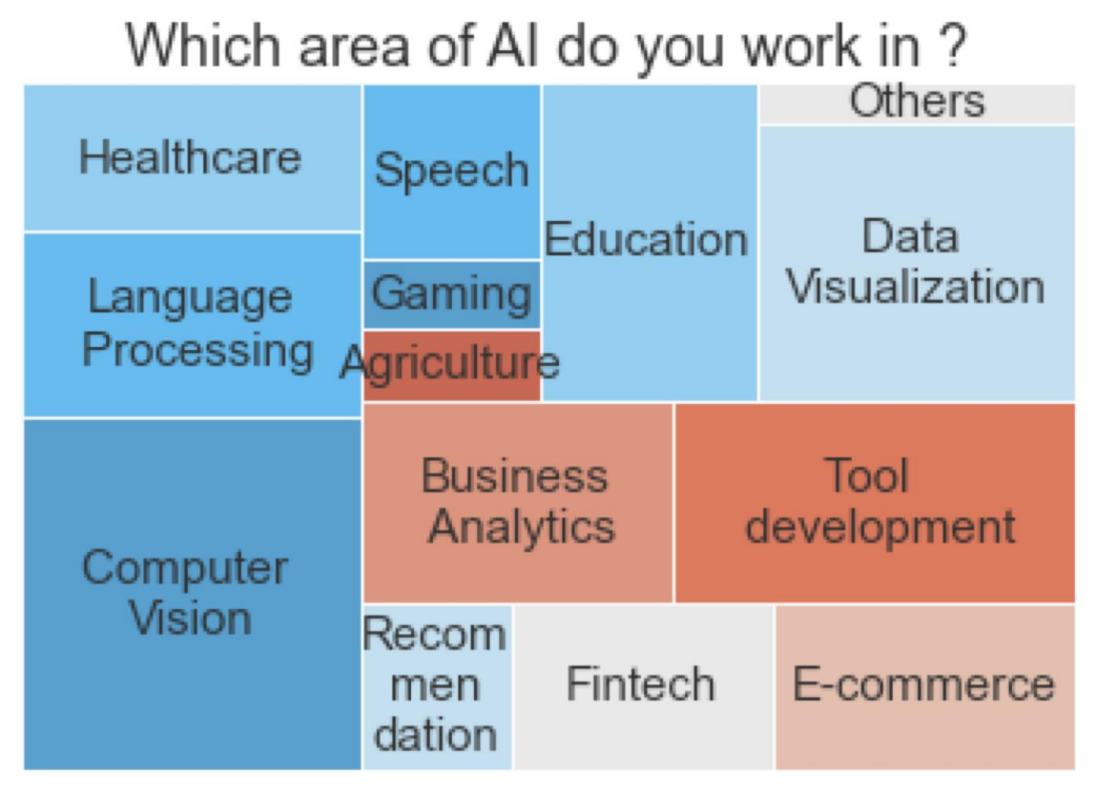
Graduate students are less enthusiastic about AI and more aware of potential harms compared to undergraduates.

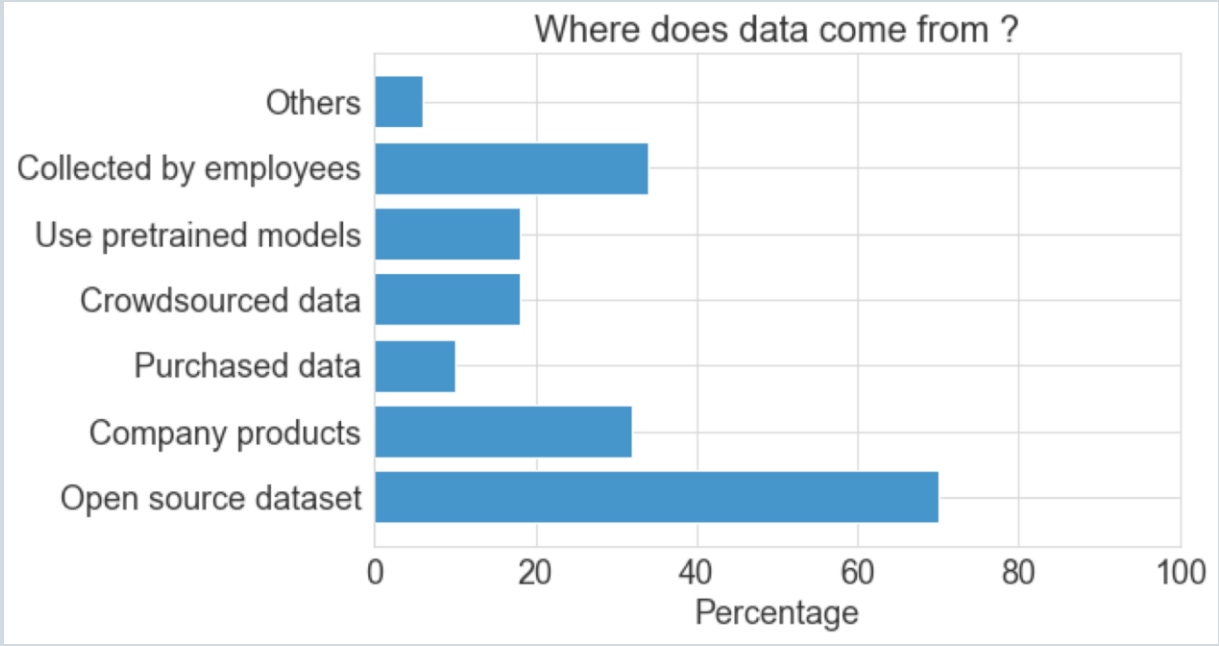
AI Ethics in Practice

How is AI practiced in Nepal ?

Do current practices lead to ethical AI ?

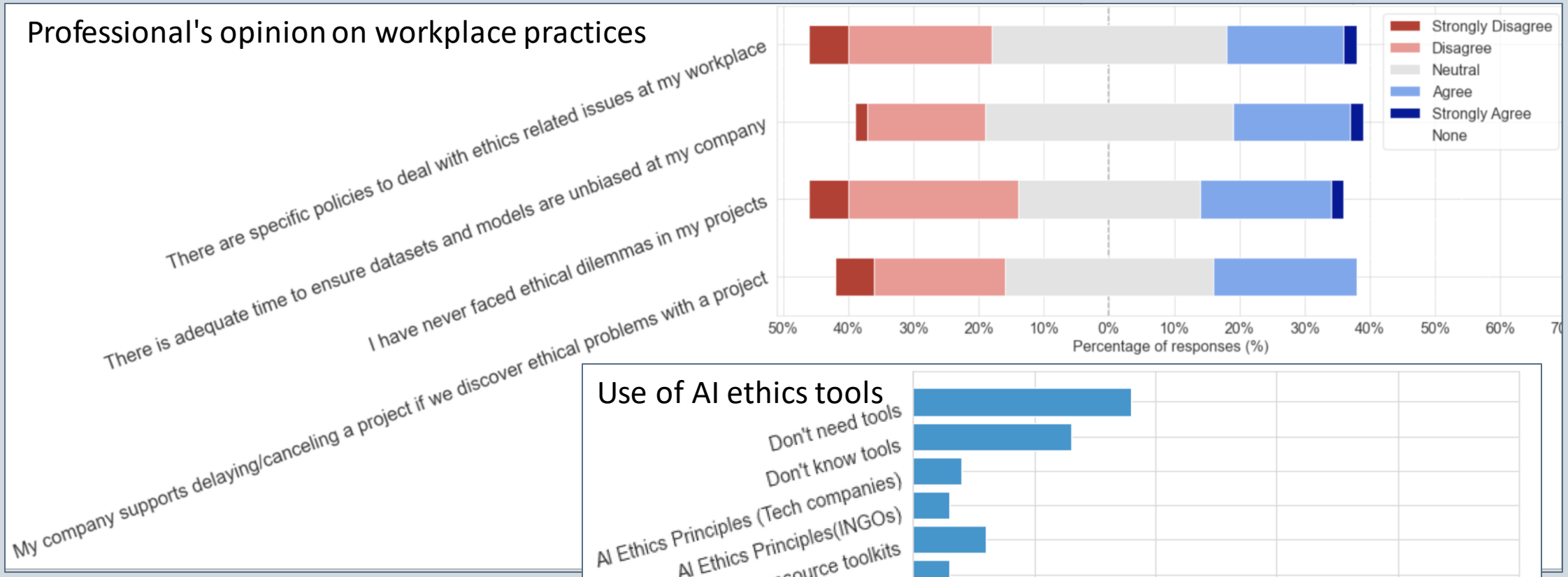
How does work-role affect opinion about AI ethics?

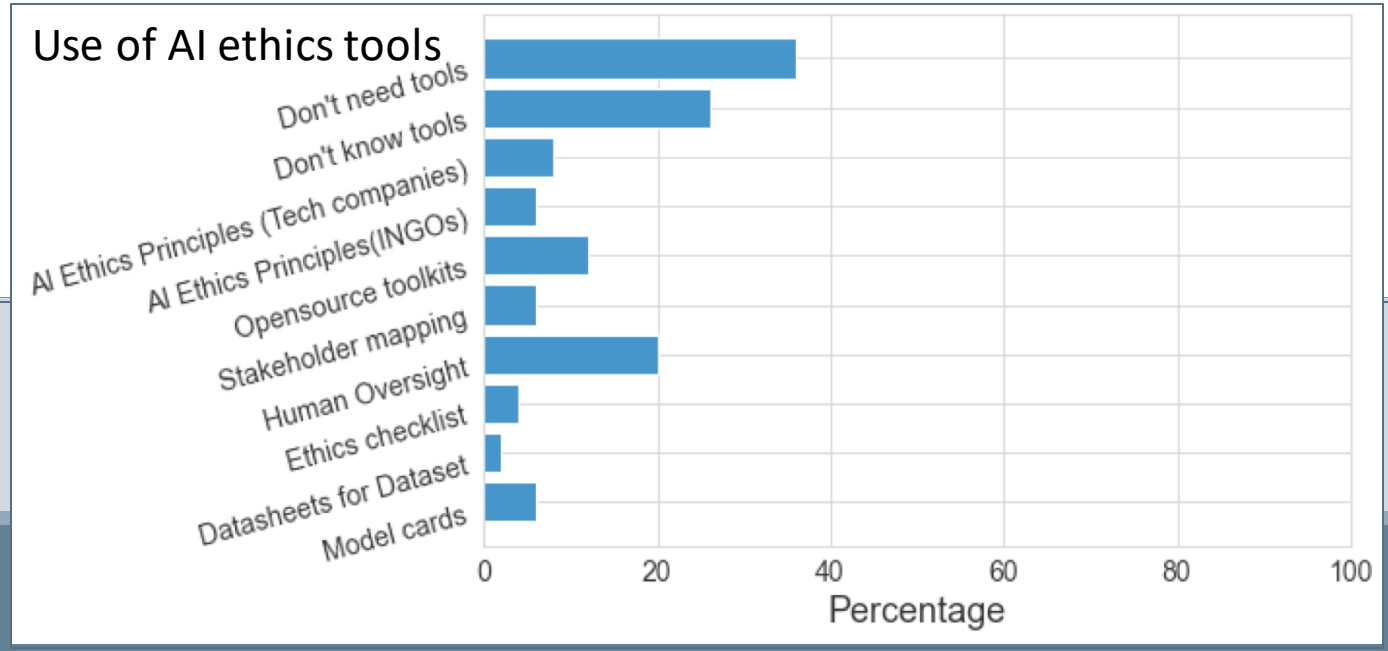




AI Practice in Nepal

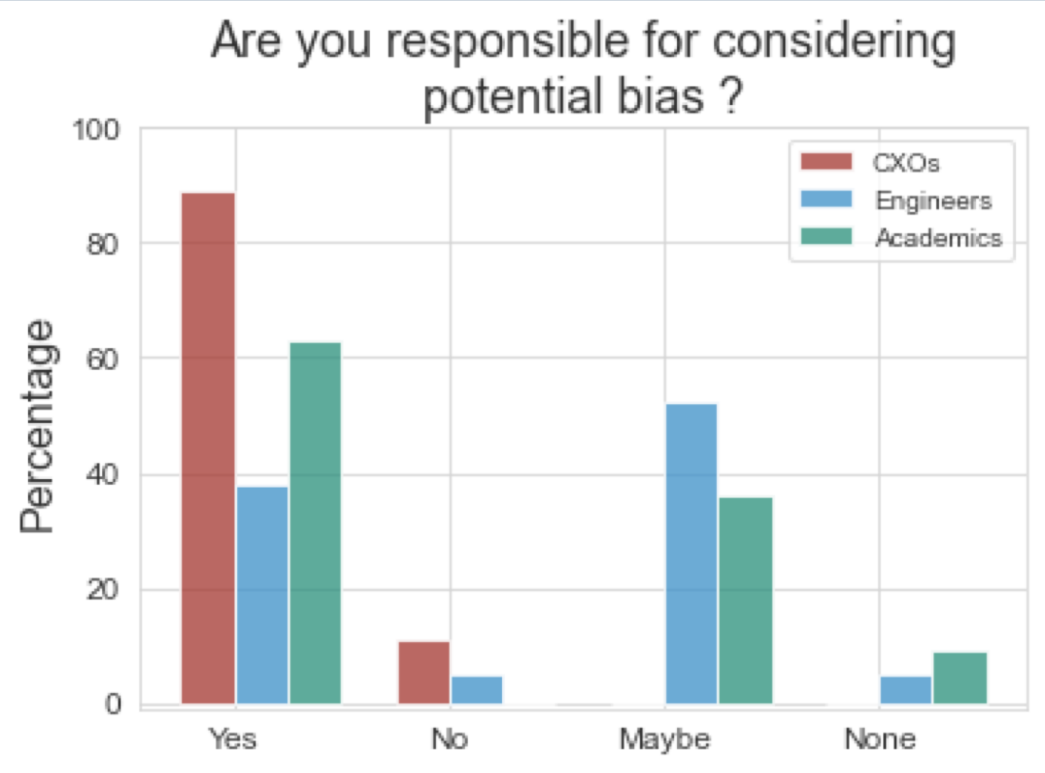
- AI practioners work in a diverse set of applications.
- Dataset source mostly open-source data.

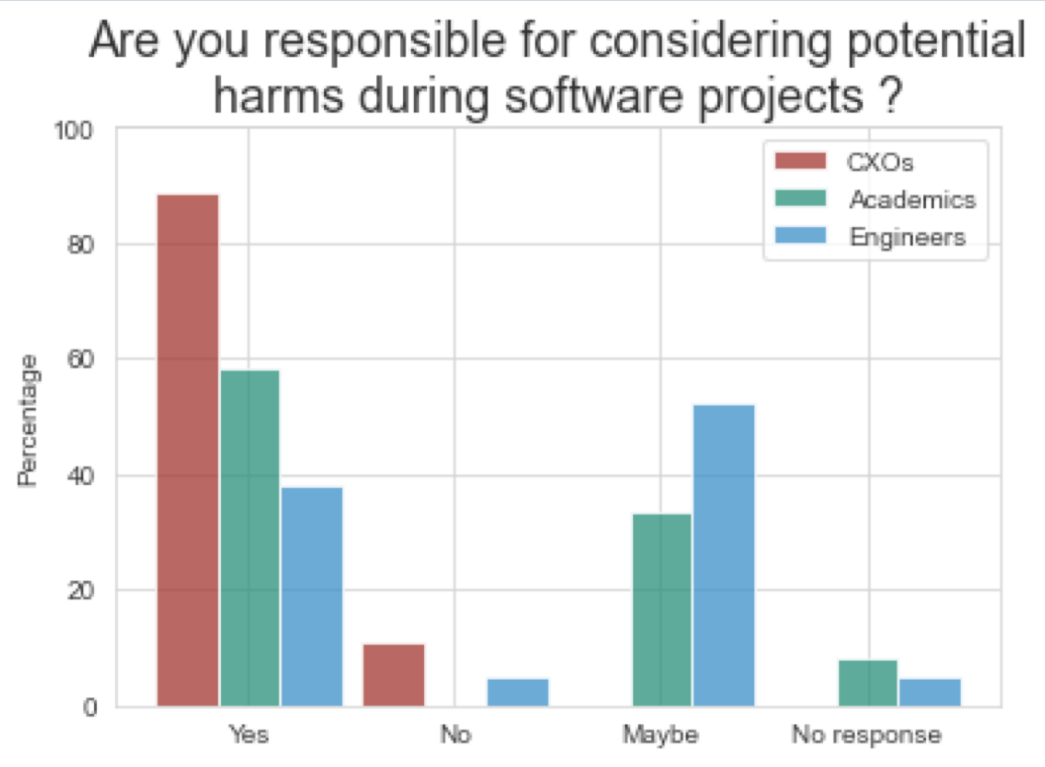




AI Ethics in Practice

- Use of AI ethics tools is not widespread.
- Most respondents feel neutral about their workplace practices.





AI Ethics and Work-Role

CXOs are more likely to consider themselves responsible compared to academics and engineers

To Conclude

A word of caution .....

Limitations of the project

Short **time-period** and small team.

Online and mostly quantitative survey.

Covid related constraints.

Survey limited to **STEM** students and practitioners.

AI Users not included among stakeholders.

Limitations of the survey

Lack of participation from **marginalized groups.**

Small sample size for policymakers and professionals.

Difficult to get all the **nuance** from quantitative survey.

Phrasing issues during survey design.

Now on to major takeaways…

Gaps in AI Ethics understanding

AI and engineering curriculum does not prioritize **ethics and real-world implications.**

Information about AI dominated by **entrepreneurs and celebrity researchers**.

AI ethics is treated as a **technical problem** ignoring its social aspects.

Most respondents were unaware of technical limitations of **large datasets and benchmarks.**

Lack of **individual accountability** among practitioners.

Proposed policy solutions were often **protectionist and surveillance focused.**

Results that surprised us

Professionals were aware of issues but not reflective in their own practices.

Lack of reliable datasets was not a big concern among our respondents.

Despite media and third-party auditors discovering potential problem areas globally, respondents did not think those important in Nepali context.

Education less influential in opinions compared to experience.

No significant difference in opinion based on demographic differences.

What next ?

Needs on a national level

A **national framework and accountability mechanism** for ensuring responsible AI.

Better **engineering curriculum** to consider real-world impacts.

Increased awareness about **risks and limitations of AI.**

Diversity in AI community.

Partnerships between academia, tech industry, and civic organizations.

Inter-disciplinary AI collaborations including with non-STEM experts and digital rights activists.

Potential future work by NAAMII

Publicize and contextualize these results for more awareness.

Follow up projects engaging more **diverse participants and stakeholders.**

Training programs for students and professionals on AI Ethics toolkits and foundations.

Community events and discussions on AI Ethics related topics.

Research collaborations with **digital rights groups** on data privacy and algorithmic discrimination in Nepal.

Questions, Feedback, and Suggestions