reasoning in three ethical lenses

Personal, professional and social

why we have licensing

Licensing bodies maintain ethical standards for profession

cityu ethic-research ethic:

Honesty; objectivity; integrity; carefulness; openness

given a research and how we can comply with these research ehtics(especially human subject)

Protect human subject:anonymization;respect intellectual property: carefully states the quotes; objectivity: conclude based on correct statistics; openness: admit deficiencies

Col

A third party’s decision maker’s personal interest might adversely affect decision making. It is a fact but not a state of mind because even the most integrate decision maker will be affected by his own interest unintentionally.

engineering ethics

From a professional point of view, to perform services only in your compete area

Pursue perfection

legal liability

Innovation and regulations

For professions like doctor and lawyers, be legally liable is in professional ethics and the risk provided by clients is controllable. But in computing area, an IT service has much greater possibility to be misuse and then cause harm to clients, which is hard to control.

case conduct

Consult with Ethic review board regarding risks; employ standard cryptographic algorithms; encrypt then stored data; launch bug bounty program; evaluate algorithm and encryption methods

metrixs: accuracy and false positive?

Defined by formula: correct prediction/total prediction

Positive and negative represent the predict

True and false represent correctness of prediction

understand concepts and example

Accuracy not enough: pregnancy test(FN); diseases(FN);

Silent errors: computers can’t here ”hi google”

how to identify and mitigate bias

Check disparity between different groups. This can show potential bias;

Using adversarial debiasing(construct confronting networks); reject option based classification; reweighting data.

Privacy:

Control over information about ourselves and pursuit of relationship with others

Surveillance Capitalism Economy:

Most of the information under control of several company

Measure to protect privacy:

Anonymization && encryption

Private key && public key

Randomized response && noise injection IN differential privacy

misinformation:

Public sphere&mis/dif/mal-information definition&content moderation&govern subject

public sphere

different type of mis/dis/mal-information(false information that is distributed without the intent to cause harm/ with the intent to cause harm/truthful information that is distributed intended to cause harm)

Mis: false content; false context; manipulated content

Dis: satire or parody(讽刺); misleading content(误导);imposter content(欺骗)；fabricated content(捏造内容)

content moderation

Human moderators(hard)

Automated filtering(difficult to match human accuracy)

So we use both - human/machine hybrid systems

equality:

About status && distribution

why do we need diversity and inclusion

Diversity and inclusion have epistemic benefits that is helping us to think from different aspects