LEGAL AND ETHICAL ISSUES

In Computing

Rationale

- We live in the era of Big Data
  - a huge amount of data is being collected and analysed effectively.
- The census, Huduma No….
  - we want data privacy but …
  - we also want the government to provide services efficiently

---

Data Confidentiality vs Data Analysis

- At the doctors…

Data Confidentiality vs Data Analysis

- At the doc's…
- we want our information to be private
- but…

Data Confidentiality vs Data Analysis

- we also want patient data to be analysed

- Why?

So we can benefit from up to date research

Data Confidentiality vs Data Analysis

◉ We want to be free to send messages to all and sundry but...

◉ we also want terrorists to be caught before they attack

Data Confidentiality vs Data Analysis

◉ Legal and ethical challenges of emerging tech.

◉ E.g. major advancements in technology that allows us to manipulate things *just by the power of thought.*

◉ With EEG you can control video games, machines, cars...

PLAYING THE GAME "PONG" WITH EEG

Neuroelectrical Imaging and BCI Lab (NEILab)
Fondazione Santa Lucia, Roma, Italy
http://www.neilab-fsl.it/

BCI 2000

World of Warcraft using the Emotiv EPOC

Data Confidentiality vs Data Analysis

- E.g.:
- Mind manipulated killing in a video game :(
- Using a headset costing a few thousand shillings you can think your way to fast car driving, murder, mayhem …
- EEG monitors now easily available in the market

Data Confidentiality vs Data Analysis

- One firm creating these kits, Emotiv, collects brain data
- from their > 100,000 users in >100 countries
- Why?

Data Confidentiality vs Data Analysis

To improve its apps

E.g.: when gaming, you control the character with your mind, freeing up your hands to do other things.

"For science".

E.g.: paraplegics can control their wheelchairs with their mind.

Data Confidentiality vs Data Analysis

- Will this lead to mind reading?
- Maybe.
- If it does, is that ok?
- Unlimited potential for misuse…

Data Confidentiality vs Data Analysis

- E.g: zero freedom of thought/privacy
  - dissident thoughts = worrying you are being listened to,
    - —> harm, discrimination, jail…
    - —> You will self-censor.

Data Confidentiality vs Data Analysis

If your brain is monitored 24-7 you become afraid to test the truth of/reject ideas.

Propaganda can then be spread easily

We should think of safeguards before it's too late.

What is Ethics?

- Derived from the Greek word Ethos, meaning habit or custom.
- Shared set of societal values/principles that help differentiate right from wrong.
- Are **ethics** the same as **law**?

Ethics vs Law

- No.
- But usually form the basis for laws.
  - Laws are also specific to the jurisdiction.

Ethics vs Law

- A law tells us to do or not to do something.
- This implies there is a recognised, established authority.
- This authority decided the allowed/forbidden action is beneficial to society.

Ethics vs Law

- Ethics: what **should** I do?
- Law: What **can** I do (legally)? …

The Difference between Ethics and Laws

- Ethics: internalised principles shaping our decisions.
- Laws external rules which if we disobey society can punish us.

What is Ethics?

- Though the values are shared not everyone will be ethical.
- Laws thus **enforce** ethical behaviour.
- You can also enforce it by ostracising "deviants".

Legality versus Ethicality

- Many times, laws apply clearly in our decisions.
- They lead directly to the appropriate ethical conclusion.
- However we can also have bad laws.
- Dangerous to rely solely on them for moral guidelines...

Legality versus Ethicality

- Something can be legal but not ethical (and vice versa)...
- True?
- If yes, examples?

Legality versus Ethicality

- Jennifer Wagner (1991)'s taxonomy on the relationship between ethics and law provides a framework for understanding how ethics and law interact in various contexts.
- It emphasises the dynamic and evolving nature of this relationship, as both ethical considerations and legal frameworks adapt to societal changes and technological advancements.
- 4 categories ...

Legality versus Ethicality

- **Consensus**:
  - there is alignment and agreement between ethical principles and legal regulations.
- **Conflict**:
  - ethical principles and legal regulations are in direct opposition.
  - Adhering to one set of principles may mean violating the other.

Legality versus Ethicality

- **Ambiguity**:
  - there is uncertainty or lack of clarity regarding the relationship between ethics and law.
  - Ethical considerations may exist, but the legal framework is unclear or incomplete, leaving room for interpretation.
  - This is esp so with emerging tech.

Legality versus Ethicality

- **Gap**:
  - between ethics and law:
    - ethical principles and legal regulations do not entirely align.
  - Ethical norms may call for certain behaviours or standards that are not explicitly addressed or required by existing laws.
  - Organisations and individuals may voluntarily adopt ethical practices beyond what is legally mandated.

Legality versus Ethicality

- We can fit these categories into 4 possible states of the relationship between ethics and law:

- I = An act that is ethical and legal

- II = An act that is ethical but not legal

- III = An act that is not ethical but is legal

- IV = An act that is not ethical and not legal

Legality versus Ethicality

- **I = An act that is ethical and legal** (the act is ethical **and** codified in law).

  - Thus **consensus.** E.g. legislation that

    - protects individuals' privacy (e.g. Kenya's Data Protection Act, 2019)

      - this is in line with the ethical principles of respecting personal boundaries

    - criminalises discrimination due to race, gender, disability etc.

Legality versus Ethicality

- **II = An act that is ethical but not legal**

  - euthanasia/assisted suicide? Crossing red lights?

  - **Conflict:** e.g. between the ethical principle of *freedom of speech* and laws that impose *censorship*.

  - **Ambiguity**: Emerging technologies often fall into this category as ethical concerns may precede the establishment of comprehensive laws.

  - **Gap:**The ethical norms are not explicitly addressed or required by existing laws.

Illegal BUT Ethical!

- Swiss UBS Bank vs Whistleblower Christoph Meili

- Liechtenstein Tax Harbour Banks vs thieves selling data; *white hat hackers*?

Illegal BUT Ethical!

- Panama papers - How the rich exploit secretive offshore tax regimes/havens.
  - 11.5m files LEAKED from the database of the world's fourth biggest offshore law firm, Mossack Fonseca.
  - 12 national leaders among 143 politicians, their families and close associates
    - Kalpana Rawal

Illegal BUT Ethical!

- Whistleblower = "John Doe"
- Why did he do it? "*simply because I understood enough about their contents to realise the scale of the injustices they described*".
- "Life in danger".
- Willing to help prosecutors if granted immunity from prosecution.

Legality versus Ethicality

III = An act that is not ethical but is legal

- **Conflict** fits in here as well.
- many many examples... (see following slides)

IV = An act that is not ethical and not legal

- **Consensus** (the law and ethical principles align)
- Nyayo/Nyati house activities in the 80's and 90s.

Legal BUT Unethical!

- The Facebook-Cambridge Analytica data scandal
  - user data collected and used for political profiling and targeted political advertising without their informed consent (technically legal under FB's T&Cs and the prevailing data privacy regulations)

What is Ethics?

Are ethics the same as religion?

Are ethics the same as religion?

No.

They are shared values whose **source** could be religion.

Ethics vs Morals

Ethics vs Morals

❑ Morals:
   ❑ the practice of ethics.
   ❑ an individual's innate sense of what is good

Ethics vs Morals

❑ Morals usually learned from religious beliefs
  ❑ These beliefs are usually similar
    ❑ e.g. thou shalt not steal

Ethics vs Morals

❑ However:
  ❑ Is abortion moral?
  ❑ What about the death penalty?
  ❑ Same sex marriage? or discrimination on the grounds of sexual orientation?

Ethics vs Morals

Morals: an *individual's* innate sense of what is good

We expect companies to be ethical.

Yet they are not individuals.