

1. Face Recognition in Social Media and Law

What are the legitimate applications, if any, of face recognition technology in your view?

- Programming bias will return results of bias, institutionally.
- Apple Face ID. They rolled out the technology and was potentially biased.
- Airports and subways don't differentiate African Americans or Middle Eastern very well.
- Human beings MUST control technology.
- What role do the users play in self-regulation?
- No one will be misidentified in the future.
- Human bias will always exist.

Have you done anything to limit the extent to which large companies have access to images of your face?

- We should have some control or guidance with these technologies.
- We have become slaves to this technology.
- Have companies, government, society or individuals been at fault? Who should assume responsibility for governing this technology?
- Population education is extremely important, especially to combat apathy.

Do you think companies such as Google and Facebook should be limited from using peoples' images in any way?

- Intent is good, but bias and error go in, and intent can become nefarious.
- FaceApp got so much energy and attention over a short period of time.
- They shouldn't use this information in anyway.

Do you think law enforcement should be able to use face recognition technology for any reason?

- Who is law enforcement?
- What master does this serve?
- Most regulation is reactive, how do we remain proactive.
- Parallel to guns. Everyone knows guns can kill. Where is the regulation to limit these actions or bad actors?
- London is using facial recognition for law enforcement, but must comply with GDPR. But consider "Brexit" in this context. We are only as good as the laws we are willing to let govern us.

One last "horrifying" aspect: the scientific effect of reacting to these technologies. Want to increase dopamine rush. They'll figure out how to do it.

2. Risk Assessment and Predictive Models in the Legal System

Joe - AI group, economics, SBL

Ashley George - Diversity and Inclusive Excellence Education

Ed Wiltse - English and prison project/program, CAS

Noel Wolfe - program director for Legal Studies, CAS

Stephen Hill - org behavior, SBL

Tyler Mosely - IR

Cheri Boyd - math, statistics, analytics course, CAS

1. What should be done to ensure that machine learning is used fairly in the context of the law?
2. Should companies be required to explain how their machine learning products make predictions, decisions or recommendations if they are reused in the legal context, despite the intellectual property associated with developing these tools?

From HR perspective - disparate impact, disparate treatment

EEOC rules and guidelines exist, you are accountable for the algorithms you use. The 4/5th rule is in existence since the 1970s, easy to calculate.

Legally, when showing disparate impact you do not need to show intent.

Compare to Environmental law, before you do something you have to show an environmental impact.

Disparate impact cases are difficult cases to prove in court.

The makers of AI as a group are not representative.

How do we/they write programs to incorporate historic disparate impact?

How are regulations determined?

Who is involved in setting regulations?

How is the machine learning, training done? (Is it equitable?)

Different data training sets are used to uncover errors that the algorithm makes, and then the algorithm is improved.

Criminal justice context: how will AI and machine learning create future injustice by coding in past and current poorly understood injustice?

(How) Will human flexibility in decision making still be possible?

An algorithm is currently determining who gets bail and what amount, and an algorithm is being used in determining sentences. (Sentence lengths?)

Example: The end of cash bail in California has disparate impact.

Prisons exist to make money - charge to make phone calls, get food, get health care products. The system does not provide basic human rights in an equitable way.

Predictive modeling about criminal behavior:

AI can't account for all the situations and circumstances that contribute to behavior.

Commodifying information is a (relatively new, AI related) specific concern.

Information is now a product.

Why does a company (for profit) have to make the AI? Why can't a group of individual professionals overseen by 'the government' make the AI?

Why can't the (our) data be 'owned' by the government, thus our data is 'owned' by all of us?

In a for profit economy, all the wrong forces are impacting decision making

Third party development of algorithms

Economists have tried asking, "Can you push the problem back into the market?"

If you/we have to pay for bad/wrong behavior, will you/we then behave in a way that involves less risk?

"The power of AI" or "the current situation as society is learning about AI being used and developed" seems to be tearing down long developed and challengingly established protections.

Are we starting all over again and allowing new misinterpretations of data to be incorporated into AI based decisions?

Who determines and oversees regulation?

Wrongful incarceration costs money when proven, but it is not impacting the system the way that it should be.

Selective systems: some systems are robust in testing and some are not.

Personality testing is robust against testing

Cognitive testing is not.

Need to acknowledge data problems from the beginning.

Decisions are being made from "bad data" (biased data) and have been in all of history.

Is AI accelerating the ways in which this is happening?

If we can now using AI make instant decisions based on current available data, is that reliable, useful, better than needing to collaborate, think and study situations in ways we did before AI?

Is having more data definitely helpful?

3. Automated Decision Systems and Child Protective Services

Summary: Virginia Eubanks's book "Automating Inequality" offers three case studies explaining how data is used to process individuals receiving public assistance. In Allegheny County, Pennsylvania, when someone calls Child Protective Services to report child neglect or abuse, an automated decision system is used to provide a "risk score" to help call screeners determine whether a CPS investigation should be triggered. Data processed by this system includes information about whether the family of the child receives public assistance, so receiving government support can increase a child's risk score. Also, once information is provided to Allegheny County it is very difficult to have removed. In effect, once a person's data is provided to Allegheny County it can impact decisions about that person for the rest of their life. The use of the automated decision system has come under scrutiny by those who are concerned that it contravenes the rights and interests of families receiving public assistance in Allegheny County.

Location: 1924

Participants:

Olajiwon McCadney

Leanne Charlesworth

Susan Sturm

Michael Rood

Lisa Sykes

Ruth Santiago

Liz Hebert

Josh Bauroth

Katherine P. Miller

Elizabeth Hebert

Lynne Vick

Joe Viera

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Discussion Questions:

1. What should be the role of data processing for those receiving public assistance?
 - a. The system is broken in terms of harm it does to the child within the system.
 - b. How do we educate so that we do not accept data as "absolute truth" despite the bias or underlying structural/institution harm that creates these disparities and discrimination in stats.
 - c. It's complicated as these tools save money in terms of time to scan and glean data in order to make quick decisions. As a result, it creates a standard of "who is safe" vs "who is in compliance"
 - d. "the model confuses parenting while poor with poor parenting"
 - e. Evidence/Data without human feeling can be dangerous
 - f. No data on rich parents (paying discrete doctors)/ and are more likely to believe

5. Big Data and AI in Healthcare

Facilitator: Cathy Rasmussen

1. 23&Me discussion.
 - a. Genetic info should be communicated to consumers by trained people with ethics expertise. 23&Me doesn't provide this support.
 - b. Regulation and legislation are needed to ensure companies like 23 are complying with HIPAA.
 - c. With all the major data breaches occurring, it's obvious big data systems are hackable.
 - d. Who owns genetic data? Example: Genetic testing may be done on embryos. Who has access to and control of that data in the short and long term? The child eventually? Parents?
 - e. Collection and use of other kinds of health data. How often are we on camera? Are our phones listening to us?
 - f. Electronic Health Records and AI
 - g. York Institute is working on implementation of EHR. What are the ethical questions?
 - h. Andy Opette has published on ethics in EMR for PT.
 - i. Important issue: protecting data
 - ii. Need to preserve the human element in EMR for creating goals, treatment plans, and reports for both students who need to learn these clinical thinking skills AND for professionals to write for individual patients/clients without relying solely on canned prose generated by AI based on a symptom/disorder profile.
 - i. URMC MyChart. Parents don't have access to their children's records once they're over 12. Who else DOES have access to this info?
2. Facebook issues
 - a. What is FB's motivation for any of their initiatives? Is working on suicide prevention for entirely altruistic purposes or is it to generate positive PR after a number of scandals?
 - b. Need for informed consent to use consumers' data for research purposes. Is FB held to the same standards as medical/educational research institutions?
 - c. FB has been conducting psychological manipulation experiments for years with little fanfare or oversight. Logging in technically provides consent to use of our data, which we often don't realize is happening. Is not actual informed consent.

- d. What are the lines between a private company and what has become a public utility?
3. Naz questions: Will our graduates have the ability to have impact on industries with the level of credential they gain here?

Section 2 Lisa Durant-Jones

Smyth 161 - Notes from break-out session on ethics in healthcare

- Comments from keynote
 - Law can provide the framework for ethics, but takes years to catch up
 - Lots of opportunity for AI in healthcare
 - Responsibility must be on the healthcare practitioner (Codes of Ethics)
 - HUD law was scary by removing individual responsibility
 - Healthcare has been dealing with this for a while; other industries are starting to face it now
 - Ethics must be connected to civil rights/human rights
 - Human genomics can be used extensively now if disaggregated; consumers must drive the laws to protect us
 - Patients must advocate extensively for themselves; people must be taught this
 - HIPPA is not well-maintained within the hospital; it's easy to see/hear about other patients
- 1. What safeguards should be put into place to protect people?
 - a. Where are these data being stored and how are they being used downstream?
 - b. How can it be regulated/controlled?
 - c. Consumer education is critical
 - d. How to stop the runaway train of big data?
 - e. Example: Target predicted that a teenager was pregnant and sent ads to her home
 - f. Security and privacy systems must be robust
 - g. Targeted ads from app use should be banned; who will oversee/regulate this?
 - h. Single sign-on (e.g., through Facebook) allows the other company to access all of your data
 - i. Personal ethics must be paramount - "Do no harm". What about when people don't act personally ethically?
 - j. Ethics courses should be more widely taught

- k. We need a new Belmont report to account for the new technological landscape
 - l. General Data Privacy Regulation (GDPR) in the United Kingdom - includes the “right to be forgotten” or to revoke your data. This is causing companies to have to prove that they have removed your data. We a federal law here in the US
 - m. Naz can model ethical behavior to our students
 - n. Should HSRC (or another body) check back with research studies on campus to ensure that they are in compliance with what they said they would do to protect human subjects
 - o. Our students are “digital natives”; they don’t know what life is like without technology. They don’t seem to think about how their data are being used. We should teach them about this to help them protect themselves.
 - p. Value seems to outweigh the risk for many young people. However, some of them seem to be starting to talk about it even if they don’t know how to navigate this.
 - q. Young people’s frontal lobes are not fully developed, which affects their decision-making
 - r. The Electronic Health Record committee here is ahead of the curve in that policies regarding electronic data has started. We need to expand beyond HHS.
 - s. No AI technology should be devoid of human interaction
2. Should Facebook be allowed to do research on the mental health of their users if it helps prevent suicide?
- a. Resounding “NO!!!”
 - b. Slippery slope
 - c. How would they even do that?
 - d. It’s encouraging that there is a field of ethics in this arena developing because some things have just been allowed to happen
 - e. Suicide is the #1 cause of death for people 13-35; Facebook should not be involved in this as they are just using data and predictions. Their goal is selling data.
 - f. Algorithms remove the human judgement which seems dangerous because there are gray areas
 - g. Young people aren’t even on Facebook much, so we need to make sure we are aware of all of the platforms they are using and how they are thinking about privacy on those other platforms
 - h. Help students to think in terms of a “growth mindset” with their technology. Use things that help but not hurt in that effort
 - i. “We’re not saying “no” to technology”

- j. After further discussion, could there be safe ways to learn about human behavior, common themes to help prevent future suicides
3. Should genetic testing companies be allowed to share DNA sequences of its users if there's a perceived population benefit?
 - a. There have been crimes solved from this (e.g., serial killers)
 - b. There can be a greater good!
 - c. As long as there is consent and deidentification it might be OK
 - d. But there can be data breaches which is concerning

In closing,

- Who will deal with and how will we deal with these issues at Nazareth, even aside from the designated AI major?
- Who will we hire to deal with these issues here at Naz?
- Can't be siloed
- Will it be the "AAA" or "HUD" regulatory perspective that wins
- "At the end of the day, these apps are there to make money and don't care about the human factor"

6. Big Data in Education: The Failure of inBloom

a. Summary: In 2014 Non-profit education data company inBloom shut down in response to concerns from parents and community data advocates about the use of student data for improving student outcomes. Touted as a possible solution to disparate outcomes by some and decried as surveillance by others, the use of student data in education has become a contentious issue. Aimee Rogstad Guidera, the executive director of the Washington-based Data Quality Campaign, has said "the challenges surrounding inBloom, which partly stemmed from public unfamiliarity with cloud technology and confusion about the use and security of student data, illustrates the importance of helping the public, and especially parents, understand how increased access to data helps their children succeed."

b. Questions

i.a. What are the most important benefits associated with using student data to improve educational outcomes?

- Using "little data" is valuable at a curricular level (measures specifics of teaching and allows for adjustment of instruction). Can match with student learning outcomes.
- Individual student data helps make valuable decisions, such as appropriate supports, next steps in instruction, etc.
- We will want to examine data that is not just "test data": for example, scheduling of classes and student athletes (not having enough sections at particular times), or research about when to offer High School classes
- Data, disaggregated by demographics or other individualizing criteria can help guide decisions and/or expose aspects of realities of students that may not otherwise be revealed. This can assist advocacy.
- If we don't have the data, we can't see the patterns that can appear. Helps us to ask questions.

i.b. What are the most important risks associated with using student data to improve educational outcomes?

- The assumption that the data is valid
- Development is not as easily quantifiable. How does "big data" account for the myriad of variables that should be considered in educational outcomes?
- Need to recognize the value of both quantitative and qualitative data. Often quantitative is privileged due to ease, appearance of "scientific validity" etc.

- Data can be used (or twisted) to match particular agendas (political, economic, personal, etc.)
- Who is interpreting the data? How accurate is the data and how accurate is the interpretation? (Who is providing oversight of this??)
- Are we missing the moral society of caring when we focus on big data?
- Outcomes can sometimes over-emphasize short term outcomes rather than long term benefits (example of English learner who may learn English words faster in year 1 if the focus is exclusively on English, rather than the long term benefits of bilingualism which leads to better outcomes in the end. Another example is first destination data on Naz graduates and how that is gathered 6 months out. Health care data follows a similar pattern of examining the short term benefits, rather than long term even when they contrast.)
- If patterns are identified, then we can fall victim to overgeneralization and stereotypes.

ii. What types of data should and should not be used in predictive modelling of student outcomes?

- If AI is used in education, would it be used in predictive modelling for students? We need to be careful. AIMSWEB (software used in schools now that predict how students should predict. Currently used with reading and can be used with math. Using linear models of slope and assumptions of linear learning rather than a spiral).
- Question of what the variables are that are used in models like AIMSWEB-according to Ellen, it's only two tests!
- What are the "outcomes" that are determined? Who determines them? How? Why? Based on what?
- Connection between data and practice needs to be made. Technology could help interventions by helping to interpret how students are performing.
- Chemistry is using ALEKS (a system of data) that allows students to complete a pre-test for diagnostic purposes, and then determine what needs to be learned. Follow up test re-examines both the new learning as well as RETENTION. (Some students could actually drop from the pre-test score if no attention is paid to the content of the pre-text that had been successful). Some students could over emphasize the new learning and forget the old.
- Pre-tests may or may not be accurate. Sometimes don't test what students actually know. Role of guessing can create false impression. Students who are savvy could quit while they are ahead if they realize that the test they take will be longer if they are successful. They could intentionally perform less well.
- Need to have "little data" to make instructional decisions.

- Self adjusting algorithms based on what a student knows can provide the basis for “individualize instruction,” but also can serve to replace quality instruction (a danger of abuse of this kind of system).
- Danger of mastery of knowledge rather than actual performance ability. Need to have both.
- Use of these systems requires that educators understand human/student development as well as contextual factors. Teachers can use this data, but shouldn’t over emphasize. Must be able to interpret data.
-

iii. What sorts of educational interventions might be best supported through student data modeling?

- Group opted to skip this question and focus instead on other AI issues such as security, ethics, etc.

iv. Do you believe that beneficial learning outcomes will provide impacts positive enough to justify large scale processing of student data?

- There was a local example of Pearson (owner of AIMSWEB) and how the data that had been piloted in many local districts had been “compromised.”
- Hackers are targeting school district data because school districts don’t have the same financial resources for security that larger businesses have.
- Companies that provide big data services need to be able to ensure security of the data.
- Teachers are finding tools that are not necessarily school district wide. Some tools can be used to mine student data if it is not used properly or with a critical eye.
- If Pearson (or some other company) is a for profit company, what is the role of the “for profit” aspect? Who is the watchdog? What is the connection between profit and how data is collected, archived, etc.
- Government funding can be a source of inappropriate use of funds.
- Educational professionals (classroom teacher, SLP, SW, Health Educator) must all be aware of issues related to Big Data
- What does AI mean for coursework and/or experiences, and how we are preparing students?
- Data is collected all the time: personalized ads based on prior internet searches or site visits. Much of this is hidden.
- There is a fear that AI is going to replace people, but there is more of a need for keen intelligence, critical understanding of our interface with the world and with data.

- Naz can play a role in preparing the leaders, but we also need to think about educating consumers/users. How do we better teach critical literacy/media literacy.
- The Press has not shown a favorable light on teachers. Will AI be used to further criticize educators?
- How data is collected matters. The type of data matters. For example, the Chicago police force uses profiling (potentially racial) to predict criminal behavior/intent. They work with Police Officers and a Social Worker to visit the targeted people to inform them and to “intervene”. Changes the conception of a crime: when is a person considered guilty. Another factor related to this was the aspect that this process also used social media data.
- INBLOOM was kicked out of many states due to resistance from families and teachers. Many people opposed. They were funded by the Gates Foundation.
- Quantifiable data has a role, but reducing a person to 400+ data points and some kind of algorithm can be dangerous.
- Trauma informed education data collection has had a positive impact on how schools discipline, work with students, etc. (This is an example of how data can be helpful, and also an example of the importance of selecting the type of data that is examined).
- Special Education and proportionality is another example of the benefits of examining data.
- FERPA laws impact the use of data. Changes in the laws also can have consequences.
- We need to think about the context of the various examples and how they can be interpreted.
- We recognize that this topic is very broad and we can't be “for” and “against” data.
- What protections are there? Who gets the data and how can they use it?
- Danger of inherent sexism and racism built into the AI systems. Humans are behind AI systems. Naz can have a role in educating the people who are behind the work.

7. Autonomous Vehicles

a. Summary: Autonomous vehicle technologies are being developed at a rapid rate by Tesla, Uber and other companies. These technologies pose risks both at the macro level, causing massive job loss for professional drivers and at the micro level, making life-and-death decisions in the context of an auto-accident.

b. Questions

i. **Some have touted education as the best solution to the issue of massive job loss for drivers and others who are likely to be impacted by the development of machine learning technologies. To what extent can education serve as a solution for this macro-problem associated with AI technologies?**

Geography will continue to cause issues, location of drivers is often really remote even if they are certified, how do they work for the big companies?

Time & effort to retrain this size of audience would be incredible.

- Possibly ride-along to work with the technology instead of doing something completely different, maybe in a scaffolded way
- What happens if an accident occurs?
 - We talk more in-depth about this at the next question
- Corporate responsibility vs college-level responsibility?
 - Federally-mandated retraining seems too heavy handed
 - Maybe adult learners, second career graduate programs
 - Retraining vs equity
- Reference to Wall-E (Disney Movie), what does everyone do if automation takes over?
 - This comment connects well to the next sub-question

Are there better solutions than education, such as universal basic income?

UBI is so large, maybe not something that can be tackled

- Perhaps UBI would help cushion the blow, make retraining more digestible

Might UBI create new jobs?

- Freedom may be what allows for a burst of something new (ex. Arts, creativity)

Should the roll out of these technologies be limited in order to allow people time to pursue new careers?

AV should be all or nothing!! It could be flawless, humans are the flaw

- Ex Google Car was exceptionally cautious, it's the human in the car that often causes the accident
 - For everyone's safety!!
 - Potential impact on insurance rates, maybe they will be able to be the driver for this gaining traction
 - Treating AV as public transportation
- In terms of this specific technology, no. The infrastructure needs to be updated, this particular tech really should not be limited
 - Infrastructure maintenance may be a new job/field
 - Ex adding sensors in the road

Awareness of what the technology actually does is not really widespread, will it become for this technology since almost everyone drives?

Why is public transportation not an area of investment? Maybe this is the way to move in the future! Affordability of this type of technology may be a real issue for adoption.

ii. **How should vehicles make determinations about what to do in the event of an accident?**

AI business people...will they allow the tech to keep records of accidents? Can the control the AI to shut down or erase data?

Automated call center to connect with emergency services, not enough

- Ex of planes, almost fully automated pilots are just ride-along mostly in case of emergency

Should the occupants of the car be allowed to make determinations about protecting their own life over the lives of others, or should everyone be required to abide by the same model of risk to themselves and others?

- Unless fully automated and deployed, yes there should be a tech ride-along—once it becomes a little less high-risk than fully automated
 - Dedicated lanes for AV only is an idea to get started
- Do we have control? AV actually could be a lot safer without human control
 - So essentially, the group’s answer was no as long as there are safety measures built in to ensure we can stop the technology (ex. Metal spikes, tires that deflate in case the car “runs away”)

Should there be negative consequences associated with placing the value of your own life above others?

We feel that American values align with self-preservation, so no.

- Discussion of the “runaway trolley” scenario, where we are in the trolley in an AV

Maybe the ride-long folks subject to “captain down with the ship” rule?

- We speculate that much of the AV in the future would not even allow for this type of decision-making because an accident would occur so quickly (ex. High speed train in China)

Questioning the liability and terms-of-agreement for use

- Who makes the decision about what types of technologies are in the AV?
 - texting while driving can be halted automatically at this point in time, but it’s not enabled to save lives? Waze has this already.
- Default settings of cars need to be carefully considered
 - Again, linking decisions to insurance may be the only way to make these types of efforts effective
 - Who is creating pushback from a legal perspective through legislation? Someone/some party is clearly controlling this, probably linked to profit.

9. Use of Machine Learning to Interfere in Democracy

Russian Interference

What can we do about it?

Ethics?

Better Tech?

Education of students?

How do we educate our students of this threat when they Google everything?

Using AI to propagate deep fakes to find the evidence for these videos/pictures

Training population to be more critical

How to deal with voting

More complicated than education, voters to questions everything

Which knowledge can be trusted?

How do we find “authoritative truth” in facts?

Freedom from vs. freedom to

Role of media victimization

Crux is the collection and storage of data

Can it be regulated?

Generation not trained on internet

Emotional ads passed off as “news”

Train students

Skepticism

Multiple interpretations of events

Matthew Brady photos manipulated

Now with new technology

Our role to use liberal arts to train skepticism

Role of data in other industries like medicine

Should there be federal regulations in AI tools?

Do we regulate free speech/lying?

FB anti-conservation

How do you do it

SCOTUS Erring toward free speech

Tough fight

Medical data

Iroquois Indian anecdote – training Naz students on ethical values

You tube videos “Sponsored by” on videos might be one way to regulate “source of origin” laws

Russian channeling future activities to appear more Ukranian

AI to combat AI to counter

Is the Solution “more technology”

Better not more

Must be human attached to all technology

What happens if government regulates it (the industry)

Do we trust the government to regulate it?

Can AI clean up the problem

Better solution than nothing

Growing pains of new technology to catch up

Assumes that we stay with democratic policies

Is fact-based reality an aberration?

Need to educate our students on being critical

12-The Evolution of Security, Privacy and Data Ethics in Business. Questions for group.

10:15-11:15pm

Present: Diane Ariza, Dale Leyburn, Rochelle Ruffer, Gerard Zappia, Cindy Covill-Eckert, Cathy Leverone, Eileen Beiter and Emily Carpenter.

I. Welcome and Introductions

II. Before addressing questions, audience discussed keynote address. Comments shared included:

- Skills what are those needed for students?
- What are the values in the business industry and how that aligns with ethics?
- It Is overwhelming! Make it tangible.
- Unclear how curriculum in Nursing aligns with AI fit in.
- Critical thinking is a mess!
- Very smart and very naïve
- Not a clear vision for mission and outcomes. How do we get our arms around this?
- Professional style is weak
- Wasn't clear how can Naz benefit from all of this? He didn't address. Overwhelmingly! What this has to do with us?

III. Questions addressed

(Audience was not happy that they did not have the questions beforehand to have time to further elaborate)

1-In what ways are the issues of privacy and security like/unlike those of data ethics?

- We are getting information free but at what cost?
- People are naïve about that? How do we educate customers?
- Impossible to be anonymous! No way to re-set?
- Once they know what you are, do they control you?
- Policy makers -how do they understand?
- Where is the consumer's responsibility? Who is going to drive this?
- `Speed of light. How we can keep up?
- Increase in individual and group profiling – Diversity.AI
- Questions of what can we build vs what should we build?

- Economics driven, do we have time to talk about ethics?
- Also, since there is no absolute authority to whom we can appeal for guidance, it is important that we, the data creators, suppliers, and users, should engage with these ethical considerations.
- Culture of machines vs culture of humans?
- The risk of benefit vs risk?
- Diversity and Equity - Are we currently concerned now? So why should we with AI?
- We are getting free goods in exchange for our “information” and are people aware of this? The ethical issue and privacy issue – are people really aware? Are we properly informed?
- It is impossible to be anonymous. Demand curves are created by our internet use. Is this ethical.
- When are consumers, policy makers and companies going to be aligned to manage AI and the ethical component?
- What are the positives of AI – the customization of information.

2) Do you believe that the ethical questions at the forefront of our current conversations are likely to be resolved in the same way that questions of privacy have been resolved?

- There is a skepticism that privacy issues are really resolved? Such as Equifax.
- What privacy issues do we think are being well managed? Privacy menu settings, (like Facebook, handshake)? There is a tradeoff when we allow programs to access our personal data.
- Group concerns were that the college needs more focus in what our mission is in bringing an AI to the college. What are the perceived outcomes for our students? There is concern that this needs further development.
- We discussed our concern of the lag between technological changes and societal ability to catch up with the society and public policy.
- As we discussed the questions of the session our group kept coming back to the conversation that we look forward to having a greater understanding of what the move to adding AI as part of our college will look like and how we can best prepare our students in this quickly changing environment.
- Summary – We spent time discussing that there was confusion of what the learning outcomes would be education and understanding of what the overarching goal is for our institution and what is the best way to educate our students in this important yet quickly changing topic. In addition to a minor should is should every student take a course in emerging technology?

13. Decision-making frameworks: Ethics or Human Rights? Discussion

- Universal Declaration of Human Rights seems to be the only basic set of rules (or data) that we have to go by. Human rights is more about compliance.
- Ethics runs much deeper than simple rules.
- What is the interface that will be used to teach ethical compliance?
- How do we use “programming” to teach ways to be kinder or see other perspectives
- Are our own principles and concepts of human rights keeping up with AI? Privacy rights are a prime example testing this question.
- Cultural norms and the impact on the long-term, not just here and now. We need to think longer term.
- There must be a position of an ethical checker who is independent and goes into companies to check.
- *Suggested book to read: Human Plus Machine
- They will need to evaluate ethical theories and practice using those theories as the tool.
- Need to use more relatable examples and recent examples such as Boeing planes, and bank fraud
- Resistance should be built into the program @ Naz. Having the skill built up to be comfortable to resist and question practices.
- If we have this as part of the program, we should be open to having our own internal data investigated for compliance and if there are ways our offices could improve their data measurement and collection. Are we brave enough?
- The people who feed the machines are the ones who are responsible.
- Felt the speaker needed to better discuss the ethos of how to conduct yourself and train students before they enter places such as Silicon Valley.
- Question of whose values are really being served.
- Diversity of thought is necessary to do this the right way.
- How does an algorithm teach empathy?

-Next step feels like it is to install Google in your brain w/ the point being to beat life, live forever with no problems.

-If we had a huge crash, no tech available, what happens? We need to be thinking about how to not lose our own independent thought.

-Question beyond ethics to integration of how do we properly put this into play here at Naz. Do we truly have the resources to do this well?

-Equip students with a set of questions to best evaluate situations that come up in their industries.

-Google What's Up tool was one such tool suggested to investigate

-Comment regarding corporations knowing more about us than the government. Is this concerning? Or is the other way around more concerning?

14. Technology, AI, Society Major Capstone Project

Our conversation was intended to be focused on the program's capstone course, however we had a wide-ranging discussion about broader issues, as well. I will summarize the curricular discussion below.

To start, the premise of the capstone course is that students would form teams across the various AI majors to serve as "consultants" for an external company or agency to work on an AI-related problem.

There seemed to be a general consensus of approval of the problem-focused and collaborative nature of the course. There was a discussion about who would actually generate the problem: faculty, students, or the external partner. Maybe all three paradigms could be possible. It was also suggested there may be natural partnerships on campus for this work (e.g., Institutional Research, Social Work, Center for Civic Engagement, environmental programs).

We also had a discussion about the program more broadly, and many folks suggested that the ideas being discussed in the cor courses are so vital that it might be worth thinking about how to infuse these ideas in our courses outside the program.

Another aspect of our discussion that seems pertinent to this was the fact that the capstone course (and many of the other courses in the program, really) is inherently interdisciplinary, problem-based, and collaborative. In order to run such a course effectively, the faculty member would need to be extremely well-versed in these methods.

Last but not least, we also discussed the potential for graduate work in this area.

15. TAS Lab Course Projects

- Software that doesn't require high level programming – some type of “box” – **black box** – a set of tools to change the input and see how the outputs are affected. Thus look at facial recognition – how are the outputs affected by the nature of inputs.
- Example: Climate change – wanted to develop an app to learn about climate change – which ended up requiring data analysis; started talking with RIT about this possibility – working with hardware and software folks at RIT, connecting with the science-y folks at Naz. Need to understand patterns of behavior on our end, need hardware or something to “run” algorithms
- **Data analysis** – statistical background is significant – nature of the data analytics that is going on
- Big data/data sets – yes, but also small data sets that are focused on particular areas
- To the extent that you empower AI to recommend back to you based on what you usually do – the AI agent is now making decisions and recommendations – **nature of agency**
- **AI ethics** – 1) ethics of applying AI to this or that application, 2) there is AI data out there – can we write an ethical decision algorithm given many, many variables?
- Even the issue of **how you write for AI** – defining steps, branch points – a lot of “what ifs” – need to develop a rigorous approach to your own decision-making tree
- Purposely create algorithms that create different outcomes and **think through consequences**
- Self-driving car – **who is responsible** if someone is killed? If it's the manufacturer, then why aren't we asking this question about the producers of guns or other instruments that kill? What is the dimension that AI brings into the conversation?
- AI as it relates to the **arts**? Producing music completely artificially based on data – pattern recognition, Katy Perry, etc. How do you define the line between same and different? What constitutes artistic originality? Ownership? Rights?
- What type of **authority does the AI agent impute** on those using it as a basis for their decisions, their product, etc.?
- Ability to watch how the machine learns, how the algorithm develops... Issue of how you “unpack” the algorithm to understand what is happening.
- **Would you know good AI if you saw it?** Determining the criteria itself is a “lab” exercise...
- **Relevant projects**
 - **Human genome** – statistical nightmare, start following ripple effects from not being able to describe 10 billion variations – AI is being used to tame this – what are the issues involved?
 - **Quantum physics and protein folding** – raises some of the similar issues when we think about AI being applied to a problem that we cannot fully imagine.
- **Project** – Use AI to come up with a parking policy for Nazareth College