

14 + 10 = 24

Quiz 2

Name: Kathryn Atterton

Please put name on back of last sheet
for returning assignment

1. (1 points) Please explain how to improve/develop a more realistic model based on the modeling procedure discussed in class.

+1 Use iterations and new assumptions to change the model, each time evaluating ~~for~~ how realistic the model ~~is~~ is.

2. (1 points) Explain what the 'heap of sand' concept discussed in class is about with respect to critical arguments.

+1 Heap of sand means that words are vague and we need to define what we mean so that our critical argument is clear and easier to understand.

3. (1 points) What is the purpose of a critical argument, as defined for this course?

+1 The purpose of a critical argument is to persuade others to perform some action/ make some decision based upon your information.

4. (2 points) What are the 2 parts of a critical argument, i.e. what is the structural format of a critical argument?

+2 The two parts are the premises and the conclusion.

5. (2 points) What criteria are used to evaluate the strength of a critical argument?

+2 The soundness of the premises (i.e. are the premises correct?)
and the validity of the logic (i.e. does the conclusion make sense given the information in the premises?)

6. (4 points) Analyze/evaluate the following argument with respect to the strength of the conclusion, i.e. is it a strong argument? Explain your analysis/evaluation clearly and concisely (please do not write a lot of extraneous text).

Premises:

- a. Greenhouse gases are harmful to the environment.
 b. Carbon dioxide has been classified as a greenhouse gas by the U.S. government.
 c. The U.S. Environmental Protection Agency (EPA) regulates production of materials that are harmful to environment.
 d. People and animals produce carbon dioxide by breathing.

- what does this mean? HOS

→ vague - production by what? (breathing = production)

Conclusion: Therefore, the EPA should regulate breathing by people and animals.

This is not a strong argument because premises (a) and (c) contain vague language that make the argument unclear.
 Logic? Soundness?

7. (4 points) An ABE 301 student who is failing the course comes in at the end of the semester and says the following to the instructor:

"I need to have a passing grade in this class. I am a senior and need to graduate this semester. I have worked hard on this course and I understand all the concepts and topical material. I have attended every class and handed in all the homework, quizzes, and the project. If I fail this course, I will not be able to graduate and will cost me a lot of money and another year of time. You need to give me a passing grade."

- a. Extract the critical argument and present it in critical argument format. Be sure to number all your premises and clearly indicate the conclusion.
 b. Analyze/evaluate the critical argument for strength of the conclusion.

good job of analysis

a) Premises:

1. I need to pass this course. → circular, irrelevant
 2. I am a senior + need to graduate this semester. → irrelevant
 3. I have worked hard and understand the material. → HOS
 4. I have attended all classes and have handed in all homework, quizzes, and project.
 5. Failing means I won't graduate. → irrelevant
 6. Not graduating will cost me a lot of time and money. → irrelevant

Conclusion: Dr. Tao should give me a passing grade.

b) This is a weak critical argument. Premises 1, 2, 5, and 6 are irrelevant to coming to the conclusion that Dr. Tao should pass this student. Premise 3 is vague (HOS). ~~and premise 4~~ Premise 4 implies that attendance and handing in assignments are all that are required to pass and get a passing grade.

making it unclear as well. are all that are required to pass and get a passing grade

Take home section of quiz (10 points)

Please put name on back of last sheet for returning assignment

Honesty Policy on Take home Assignments

All work on this assignment that you submit under your name should be solely the results of your efforts. If you copy someone else's work and put your name on it, you are being dishonest. Anything that appears with your name must reflect nerve impulses that originated from your brain. I expect and require honesty from all my students. The penalty for dishonesty in class is automatic failure and a report to the Dean of Students Office.

Please read, sign, and date the statement below, and return with your assignment paper. Your assignment will not be graded unless this statement accompanies the assignment.

I have read and understand the policies regarding academic honesty as related to this course and the University. By signing this statement below, I affirm that I have neither sought nor received help from anyone in the completion of this assignment and that the solutions presented here are solely the result of my efforts.

Signature:  Date: 1/19/2018

Printed name: Kathryn Atherton

The attached article involves the impacts of technology on society, specifically the legal access of electronic digital information by law agencies. The concepts of how technology impacts society is just starting for the biological engineering area, so being able to understand these issues will be important for your discipline.

Extract the critical argument from the attached article and present it in appropriate, clearly written critical argument format (premises/conclusion).

You do not need to provide an analysis of the strength of the argument.

I will analyze the clarity, soundness and validity of your presentation of the critical argument to evaluate your ability to accurately extract and present the issues forming the critical argument.

I have supplied some background material, if needed, to help you understand the basic concepts/issues of the article.

FYI, this issue will define the foundational legal principles that will govern personal/business privacy during your lifetime.

Fourth Amendment Showdown

How difficult should it be for law enforcement to get cellphone records showing a suspect's past location? That's the question before the Supreme Court on Wednesday in *Carpenter v. U.S.*, which challenges decades of Fourth Amendment law.

Timothy Carpenter is serving 116 years in prison for a string of armed robberies. During the investigation, the government obtained 127 days of location data from Carpenter's wireless carrier, showing that his phone connected to cell towers near the crime scenes.

The first question is whether this constitutes an "unreasonable search," which would trigger Fourth Amendment protections requiring a warrant. The government says no, arguing the location data didn't belong to Carpenter, but were business records created by the phone company. This distinction is important, since it invokes the "third-party doctrine" that police investigations have relied on for decades.

This doctrine mirrors the basic idea that law enforcement may gather evidence from witnesses. Just as police can canvass neighborhood shopkeepers, they ought to be able to ask a phone carrier whether its network "saw" the suspect. Ten minutes before the robbery, did he make a call that was handled by a cell tower down the street? Or was he texting in Toledo?

Carpenter says long-term data from cellphones represents something new: an "unprecedented surveillance time machine." He does not dispute that police can get location records covering a short term—say, 24 hours—without a warrant. But he argues that tracking a suspect's routine movements for 127 days is qualitatively different.

There may be an appetite on the Court for this idea. In a 2012 case, Justice Samuel Alito

The Supreme Court takes up phone searches in the digital age.

argued that police were free to follow a suspect around town, but that "longer term GPS monitoring in investigations of most offenses impinges on expectations of privacy." Four other Justices agreed.

Yet civil libertarians want more. Several groups have filed briefs making the maximalist claim that law enforcement should need a warrant before getting any cellphone location data. In that same 2012 case, Justice Sonia Sotomayor floated the idea of ditching the third-party doctrine. "It may be necessary to reconsider the premise that an individual has no reasonable expectation of privacy in information voluntarily disclosed to third parties," she wrote. "This approach is ill suited to the digital age."

That would be a mistake. The routing data from cellphone calls does not reveal the content of any communication, but it can be invaluable at the start of a police investigation, before probable cause exists to justify a warrant. In 2011 a federal judge in Jacksonville, Fla., was sitting in his living room when a rifle bullet came through his window, missing his head by inches. There were no witnesses and dozens of potential suspects. With phone location records, police were able to exclude many, and within 48 hours they found their man.

It's also important to know that Congress created the legal framework for getting this data. Police must present "specific and articulable facts" showing that the records are "relevant and material to an ongoing criminal investigation." A judge must sign off. If more protections are needed, Congress can add them. But where is the process misused today? If the threat of abuse is as large as privacy activists claim, they ought to be able to find a better champion than Timothy Carpenter.

Background:

"Americans carry their cell phones with them everywhere and, as they do, they generate increasingly granular and detailed information about where they have been and when. This data is purely a byproduct of owning and carrying an operational phone—it is created whenever the phone tries to send and receive information, generally without forethought or conscious action by the owner. And it is stored with third-party service providers who may retain it for years. The dramatic increase in the number of cell phones and cell sites and the amount of detailed, sensitive location data they generate, combined with the quantity and extent of law enforcement demands for this data, show that it is time for [the U.S. Supreme Court] to address the Fourth Amendment privacy implications of CSLI (cell site location information)."

- <http://www.scotusblog.com/wp-content/uploads/2016/11/16-402-cert-amicus-EFF.pdf>

The website reference also contains more background information from several potential stakeholders on this issue, if useful. (students interested in a legal career may find this interesting/useful)

4th Amendment of the U.S. Constitution

"The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized."

Premises in (parentheses) come from background information given. all others are from the "Fourth Amendment Showdown" Article.

Premises:

- ① (People are protected against unreasonable searches of their person or private property in the United States) - Fourth Amendment
- ② (In order for law enforcement to search a person or their private property, a warrant is required, which is issued upon probable cause.) - Fourth Amendment
- ③ Law enforcement officers can claim probable cause to receive a warrant by presenting specific facts that prove that the search of a person or their private property will provide relevant information to a current criminal investigation. - Paragraph 9
- ④ According to the "third-party doctrine", law enforcement officers can gather evidence from witnesses without the requirement of a warrant. - Paragraph 4
- ⑤ A person cannot reasonably expect that information volunteered to a third party will be treated as private. - Paragraph 7
- ⑥ (Americans carry their cellphones everywhere.) - SCOTUS blog.com
- ⑦ (When a cell phone sends or receives data such as phone calls or text messages, it connects to a local cell tower.) - SCOTUS blog.com
- ⑧ (Connecting to a local cell tower creates data about when and where the cell phone has been.) - SCOTUS blog.com
- ⑨ (Cell phone service providers store cell phone data for up to 5 years) - SCOTUS blog.com
- ⑩ The cell phone data, ^{stored by service providers} does not contain information about private communications. - Paragraph 8.

Conclusion:

Law enforcement officers should be able to collect cell phone data ~~without needing a warrant~~ like they can with ~~witnesses~~.