

CS-280-202410

Midterm Exam

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29-Feb-2024 14:30-15:45
CL 110

This is a closed book exam. You must maintain the confidentiality of your examination; do not provide any opportunity for others to copy any of your work. Electronic devices are NOT permitted during the exam. Please turn off and put away all cell phones and other electronic devices during the exam period. Have your student ID available for inspection.

Encode all your answers on the SCANTRON sheet, along with your name and student ID (starting in Column A). You must use pencil. You have 75 minutes to complete the exam and there are 41 questions: which gives you just under 2 minutes per question. Each question is numbered and your choices for each question are labelled A-E. Completely fill in, using only pencil, the circle (A-E) on the SCANTRON sheet that matches your best choice for each question number. QUESTIONS ARE ON BOTH SIDES OF THE PAGES.

This exam contributes 10 percent towards your final grade. Each question is worth 1 mark.

1. What example did Damon Horowitz give to illustrate the kind of analysis that can be done with just one person's data?
 - A. Analyzing financial records
 - B. Predicting clicking patterns on a website
 - C. Assessing medical records for insurance purposes
 - D. All of the above
 - E. None of the above
2. Which movie was NOT mentioned in class?
 - A. Apocalypse Now
 - B. Pocahontas
 - C. Terminator
 - D. Social Dilemma
 - E. The Creator
3. According to the koan "More of the Same Can Be a Whole New Thing", what is the impact of exponential growth on perception?
 - A. It makes changes appear gradual
 - B. It makes changes appear sudden
 - C. It has no effect on perception
 - D. It only affects quantitative changes
 - E. It only affects qualitative changes
4. According to the ACM Code of Ethics, which of the following is NOT a primary ethical obligation of computing professionals?
 - A. Avoid harm
 - B. Respect privacy
 - C. Be honest and trustworthy
 - D. Seek personal gain at the expense of others
 - E. Respect the work required to produce new ideas, inventions, creative works, and computing artifacts

5. What are the components upon which Judgment (Evaluation) depends?
 - A. Knowledge, Analysis, and Synthesis
 - B. Knowledge, Comprehension, and Application
 - C. Analysis, Synthesis, and Evaluation
 - D. Knowledge, Comprehension, Application, Analysis, and Synthesis
 - E. Comprehension, Application, and Analysis

6. Which fallacy misrepresents someone's argument to make it easier to attack?
 - A. Ad hominem
 - B. Slippery slope
 - C. Bandwagon
 - D. Strawman
 - E. Appeal to authority

7. Which of the following dark patterns is asymmetric?
 - A. Privacy Zuckering
 - B. Confirmshaming
 - C. Trick Questions
 - D. None of the above
 - E. All of the above

8. What is the ad hominem fallacy?
 - A. Attacking the person making the argument rather than the argument itself
 - B. Drawing a conclusion based on insufficient or biased evidence
 - C. Assuming that because one event follows another, the first event caused the second
 - D. Misrepresenting someone's argument to make it easier to attack
 - E. Falsely assuming that because two things are similar in some ways, they must be similar in other ways

9. What does the SIFT acronym represent?
 - A. Source, Identify, Filter, Test
 - B. Stop, Investigate, Find, Trace
 - C. Stop, Identify, Find, Test
 - D. Source, Investigate, Filter, Trust
 - E. Start, Investigate, Flag, Test

10. What is the red herring fallacy?
 - A. Drawing a conclusion based on insufficient or biased evidence
 - B. Introducing an irrelevant topic to divert attention away from the original issue
 - C. Misrepresenting someone's argument to make it easier to attack
 - D. Assuming that because one event follows another, the first event caused the second
 - E. Using evidence from an unreliable source

11. What do you hope to find with the SIFT method?
 - A. Irrelevant information to remove
 - B. Information to share widely
 - C. Information filtered to support your views
 - D. Better coverage
 - E. Other sources that confirm your information

12. According to Steve McConnell, what is the difference between Analysis and Judgment?
 - A. Analysis involves choosing the right path, while Judgment involves going very far down the decision tree
 - B. Analysis is about assessing the degree of benefit, while Judgment is about predicting likelihood of success
 - C. Analysis focuses on details, while Judgment involves making decisions based on limited information
 - D. Analysis is about finding faults, while Judgment is about choosing the best path
 - E. Analysis involves conducting root cause analysis, while Judgment involves justifying re-architecture projects
13. How do dark patterns affect user behaviour?
 - A. They encourage informed decision-making
 - B. They manipulate users into taking actions they may not want
 - C. They provide clear guidance for users
 - D. They prioritize user privacy and security
 - E. They improve user trust in the interface
14. What does Damon Horowitz suggest is essential for making ethical decisions?
 - A. Following established rules and guidelines
 - B. Consulting with experts in the field
 - C. Using a Kantian deontological moral framework
 - D. Utilizing a Millian consequentialist approach
 - E. Engaging in thoughtful reflection and discussion
15. Which attribute of dark patterns involves inducing false beliefs in users through misleading statements or omissions?
 - A. Covert
 - B. Asymmetric
 - C. Deceptive
 - D. Information hiding
 - E. Restrictive
16. In the description of which koan is the Domesday Book mentioned?
 - A. There Is Want in the Midst of Plenty
 - B. Perfection Is Normal
 - C. It's All Just Bits
 - D. More of the Same Can Be a Whole New Thing
 - E. Nothing Goes Away
17. What can be described as the hidden goal that is driving the direction of technology?
 - A. Maximizing human connection
 - B. Enhancing user experience
 - C. Ensuring privacy and security
 - D. The race for attention
 - E. Ethical decision-making
18. What does CIPS stand for?
 - A. Canadian Information Processing Society
 - B. Computer Information Processing Standards
 - C. Computer Industry Professional Society
 - D. Canadian Information Processing Standards
 - E. None of the above

19. What does the acronym CARE in the Proactive CARE process represent?
- A. Collaborate, Acknowledge, Resolve, Evaluate
 - B. Consider, Analyze, Review, Evaluate
 - C. Create, Assess, Review, Examine
 - D. Consult, Analyze, Revise, Enhance
 - E. None of the above
20. What does SFIA stand for?
- A. Software Framework for Industry Applications
 - B. Skills Framework for the Information Age
 - C. Systems Framework for Information Assurance
 - D. Strategic Framework for Innovation in Academia
 - E. None of the above
21. What is the purpose of the Proactive CARE process?
- A. To avoid ethical dilemmas
 - B. To avoid considering alternative solutions
 - C. To help computing professionals think through ethical issues
 - D. To streamline decision-making
 - E. None of the above
22. What can be said about the relationship between ethics and law?
- A. Ethics and law are synonymous
 - B. Ethics always align with legal standards
 - C. Law is always ethical
 - D. Ethics and law can deviate from each other
 - E. Legal standards are derived from ethical principles
23. Which ethical approach prioritizes relationships and emphasizes empathy and compassion?
- A. The Virtue Lens
 - B. The Care Ethics Lens
 - C. The Justice Lens
 - D. The Utilitarian Lens
 - E. The Compassion Lens
24. Which of the following is NOT listed as one of the six ethical lenses in "A Framework for Ethical Decision Making"?
- A. The Rights Lens
 - B. The Morality Lens
 - C. The Justice Lens
 - D. The Utilitarian Lens
 - E. The Virtue Lens
25. What is NOT a valid reason to avoid showing who answered what in a UR Courses poll?
- A. In such a large class, students remain anonymous in practice
 - B. Students will be angry, especially in such a large class
 - C. Students will lose trust in the class environment
 - D. It is a violation of privacy and confidentiality
 - E. Students may continue to answer polls, but they may be less honest with their responses
26. What risk do free societies face in managing the flow of bits?
- A. Being undercut by their principles of information freedom
 - B. Being overwhelmed by floods of misinformation and disinformation
 - C. Risk of physical catastrophes and power outages
 - D. Risk of data obsolescence due to rapid progress in storage engineering
 - E. None of the above

27. According to the ACM Code of Ethics, what is the primary focus of computing professionals?
- A. Maximizing personal profits
 - B. Enhancing personal reputation
 - C. Contributing to society and human well-being
 - D. Achieving technical excellence
 - E. All of the above
28. What is one of the social roles of privacy?
- A. Isolation from society
 - B. Maintenance of social norms
 - C. Promotion of gossip
 - D. Allowance for deviations from prevailing social norms
 - E. None of the above
29. What is the impact of digital technologies on privacy expectations?
- A. It has led to a decrease in privacy violations
 - B. It has shifted thinking about what should be private
 - C. It has not changed privacy expectations
 - D. It has made privacy violations harder to detect
 - E. None of the above
30. What did Cambridge Analytica do with the data harvested through Aleksandr Kogan's Facebook quiz app?
- A. Sold it to Facebook
 - B. Used it for academic research
 - C. Used it to identify likely voters and tailor messages to them
 - D. Deleted it
 - E. Shared it with other companies
31. Which web search resources did we use to do research using SIFT in class?
- A. Google Scholar
 - B. Web of Science
 - C. Arxiv
 - D. A and B
 - E. B and C
32. How did Q Industries (case study) violate respect for privacy of the ACM Code of Ethics?
- A. By failing to protect intellectual property rights
 - B. By failing to respect the privacy of innocent bystanders
 - C. By employing facial recognition algorithms
 - D. By failing to justify the harm caused by their systems
 - E. By failing to respect the work required to produce new ideas, inventions, creative works, and computing artifacts
33. How does the use of encryption impact personal privacy and security?
- A. It enhances personal privacy but reduces security
 - B. It reduces personal privacy but enhances security
 - C. It enhances both personal privacy and security
 - D. It reduces both personal privacy and security
 - E. It has little impact on either

34. What is the impact of perfect copies and instant communication on intellectual property?
- A. They have strengthened traditional intellectual property laws
 - B. They have had no effect on intellectual property
 - C. They have rendered traditional intellectual property laws less relevant
 - D. They have made intellectual property laws more complex
 - E. They have increased respect for intellectual property
35. How can encryption technology be described in the context of intellectual property?
- A. As a threat to intellectual property rights
 - B. As a tool to protect intellectual property
 - C. As a means to simplify intellectual property laws
 - D. As a way to eliminate the need for intellectual property
 - E. As irrelevant to intellectual property
36. What is emphasized as a crucial role for optimists in the era of technology?
- A. To create more competitive technologies
 - B. To articulate a shared fate for humanity
 - C. To accelerate the pace of innovation
 - D. To resist coordination efforts
 - E. To push for more regulations
37. Which of the following is an ethical concern related to artificial intelligence (AI) in computing?
- A. Promoting transparency and accountability
 - B. Advancing research and development
 - C. Ensuring equal access to technology
 - D. Minimizing environmental impact
 - E. Preventing discrimination and bias
38. What unexpected consequence occurs when the broom is animated by the sorcerer's apprentice?
- A. It becomes uncontrollable
 - B. It goes to sleep after cleaning the floors
 - C. It steals the sorcerer's magic
 - D. It summons other enchanted objects
 - E. All of the above
39. What is a fundamental aspect of cognitive liberty?
- A. The right to control one's own thoughts and cognitive processes
 - B. The right to access any information or knowledge
 - C. The right to alter one's consciousness through substances or technology
 - D. The right to share one's thoughts and mental activities
 - E. The right to refuse mental health treatment or medication
40. From the story about the Tim Horton's app, what is a key consideration for businesses when developing a mobile app?
- A. Collect as much information as possible from users
 - B. Only collect information that is immediately needed
 - C. Avoid seeking user consent for data collection
 - D. Share user data with as many third parties as possible
 - E. Use the collected data for unrelated purposes
41. Which of the following best describes the key characteristic of free software licenses?
- A. They require payment for the use of the software
 - B. They restrict the ability to modify and distribute the software
 - C. They grant users the freedom to run, study, modify, and distribute the software
 - D. They are only applicable to software developed by government agencies
 - E. They are automatically revoked if the software is used for commercial purposes