191CICS1 Freshman Year Seminar
Writing Assignment

October 5, 2018

1 Submission

Email your response in PDF or Word format only with subject line 191CICS1 Writing Assignment. Send your email to pinar@cs.umass.edu and the 305 student whose response you have evaluated, using the email information provided on your letter. The due date for the assignment is October 14th by midnight.

2 Your Task

Each of you have received one or two explanations of current computing threats/risks. These letters will be addressing a scenario from the 305 assignment sheet. The 305 students are intentionally trying to explain their chosen risk topic to you – a first year CICS student – in order to help you decide how much you should worry about that particular risk.

By indicating what you understood, and what you found perplexing in their letter, you will be helping our writers learn a valuable lesson on writing for a specific audience. The 305 writers may expect you to have read the background links provided in the scenario descriptions.

Please use the email information provided on the explanations to respond to the 305 students, and then submit the text as an assignment. Please give our 305 writers specific feedback on your experience reading their letters by writing a reply that includes the following types of information:

- Point to what part of their letter is clear to you and what is not;
- Let them know if they made assumptions about you (the reader) that are incorrect/problematic;
- Let your writer know if you believe them about the riskiness of the scenario they chose;
- Be specific by indicating words, phrases, terms, and/or entire sentences that you do not understand or that are unfamiliar.

Please do not spend time commenting on typos or simple sentence errors as the 305 letters are still in the draft stage.

3 Prompt Given to CMPSCI 305 Students

The 305 students received the following instructions in order to complete their letters:
3.1 Overview:

This assignment provides an opportunity for you to focus on the concept of audience — a key consideration in responding to any rhetorical situation. In this case, you will be constructing a response to a UMass first year student who is either in or hoping to join the computer science major. Read the scenarios below, and then select one of them for your response. Your reader(s) will then reply to your letter via email. In their replies, they will evaluate your explanation, providing you with valuable feedback for your revisions. You may have to do additional reading or research in order to fully answer the prompts. The articles provided are intended to be starting points of common understanding between you and the reader, but not comprehensive nor will all the terminology in the articles be familiar to your first year CS or ET student readers. The topics provided are derived from the recent discussions of risks and exploits on the ACM Risks Digest.

3.2 Specifications:

Length: 400 words, single-spaced (a little over or under is fine).

Format: these scenarios invite you to write in an email format to someone you haven’t met, and so you should plan on fleshing your message out like you would a real conversation. This means an adequate introduction and closing as well as carefully constructed paragraphs. Also be mindful of how you are constructing this reader in your mind. Ask yourself what assumptions you are making about what they know, care about, and/or may experience in relation to this scenario.

3.3 Scenarios:

Election Hacking? Many in the United States are aware of allegations of Russian interference in the 2016 election cycle. Last year a family friend sent you this link after learning that you were studying computer science: [https://www.wired.com/story/russia-election-hacking-playbook/](https://www.wired.com/story/russia-election-hacking-playbook/) Since then, you’ve noticed that both experts and novices have expressed concern about the United States midterm elections being vulnerable to further electronic tampering. The subfield of cybersecurity has become quite popular within CS; in fact, a new first year student considering specializing in security shares the following article with you, a friend from their dorm: [https://www.politico.com/magazine/story/2018/08/21/i-just-hacked-a-state-election-17-not-a-good-hacker-219374](https://www.politico.com/magazine/story/2018/08/21/i-just-hacked-a-state-election-17-not-a-good-hacker-219374). Your friend is persuaded by this article that the midterm elections are not just vulnerable, they are almost guaranteed to be attacked. They are wondering how this kid was able to hack into a mock system so similar to those used, and if you think such an attack is likely to happen this year. They have seen hacking represented in movies, but don’t understand how something as important and private as our election system is this insecure. They turn to you to learn more about the specific hack in this article, how it happened, and just how dangerous a precedent it might be. Write an email in which you explain the science behind the hack, evaluating its level of risk in the process. Be sure to help the reader decide if they should worry and/or if there is anything that they can do about the issue.

The Russian Military is hooked up to my router? You meet up with some friends for lunch, and someone starts talking about how the US Government told them to reset their router. You respond with some confusion, wondering where this is headed. Folks start arguing about the likelihood of the US Government talking to anyone about personal routers, and before long it is time to leave. You decide to email the person who brought it up in order to clarify what they were trying to share. They send you a reply containing the following links: [https://www.nytimes.com/2018/05/27/technology/router-fbi-reboot-malware.html](https://www.nytimes.com/2018/05/27/technology/router-fbi-reboot-malware.html) [https://www.defenseone.com/technology/2018/08/russian-military-spy-software-hundreds-thousands-home-routers/150474/](https://www.defenseone.com/technology/2018/08/russian-military-spy-software-hundreds-thousands-home-routers/150474/) In their reply, they ask you as someone further along in the CS major to help them understand the technology behind these concerns. They’ve got a router at home that they set up a year ago and haven’t paid
much attention to since. Should they be worried that their personal information has been compro-

mised? Has all of their data been exposed to foreign spies? Write an email to your first-year CS
major friend explaining the technical considerations behind the warning and the degree of danger this
malware poses. Be sure to indicate how urgently they should do something with their router (or not).

Are driverless cars really just one bad library away from crashing? You are asked to help
out at an orientation event for first year CS and ET majors. When asked what brought you to CS,
you mention your interest in AVs (Autonomous Vehicles). This isn’t unusual, but something about
your passion for the topic provoked one of the first year students in attendance to email you after the
event. They sent you this article from the NY Times about a fatality that happened earlier this year,
[https://www.nytimes.com/2018/03/19/technology/uber-driverless-fatality.html] and they
shared this other article explaining that the car “saw” the pedestrian, but didn’t react [https://
futurism.com/ubers-self-driving-car-decided-swerve/] They mention in their email that
they are trying to find out if the problems with driverless cars are as severe as these articles suggest.
As more states move to test AVs, they ask you how much risk these driverless cars represent for
pedestrians moving forward. Write an email in which you evaluate the risks associated with sharing
the road with self-driving cars. Be sure to take a position that helps the reader decide if self-driving
cars really are a safe bet in the near future.

3.4 Submission instructions:
In the header, you must include the following:

• Your name;
• Your email address;
• Your section of 305;
• The scenario number (1, 2 or 3) that you selected for your response.