Information Sheet for Participation in a Research Study

Principal Investigator: Dr. Godmar Back
IRB# and Title of Study: 24-275, AI Teaching Assistant for Computer Systems Course
Sponsor: N/A

You are invited to participate in a research study. This form includes information about the study and contact information if you have any questions.

My name is Brendan Doney. I am a graduate student at Virginia Tech, and I am conducting this research as part of my course work.

WHAT SHOULD I KNOW?

If you decide to participate in this study, you will use the provided artificial intelligence teaching assistant tool as you complete your coursework. You will be able to ask it questions on the CS3214 Discord about course content and assignments. For each question, it will retrieve links to relevant resources and optionally generate an answer.

Note that researchers will not have knowledge of whether you participate in the study and all data will be anonymized.

You will participate in this study in three ways:

1. Review the tool's generated links and responses via Discord: you can review the generated links and the tool's generated answer for each question you ask the tool. The content of your reviews will be collected. Each review should take no more than 5 minutes.
2. Click on links generated by the tool: each time you click on a link generated by the tool, we record that click. This is so we can gauge the usage of the tool.
3. Complete an optional survey to give your feedback on the tool. This should take between 5-15 minutes.

The amount of time this study will take is determined by how many questions you ask the tool. Each question should take no more than 5 minute to review and the survey should take more than 5-15 minutes to complete.

Due to the use of artificial intelligence, there is a small risk that the tool can generate potentially offensive or harmful text, which you will then see. Typically, this happens in response to questions that are inappropriate, offensive, or malicious in nature. We are using the field's best practices to protect against harmful input and prevent harmful output. Additionally, we will be monitoring the questions asked and the tool's responses and deleting any that we deem inappropriate or offensive. Aside from seeing potentially offensive or harmful output, we do not anticipate any other risks from completing this study.

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

CONFIDENTIALITY

We will do our best to protect the confidentiality of the information we gather from you, but we cannot guarantee 100% confidentiality.

Any data collected during this research study will be kept confidential by the researchers. Additionally, survey responses will be anonymous and confidential.

All collected information will be stored securely on the Computer Science department's computing nodes, accessible only to Dr. Godmar Back and Brendan Doney. These computing nodes are in Blacksburg VA on the Virginia Tech campus and are professionally managed.

Data on the links you click, and the content of your reviews will be stored using a unique identifier to represent you, mapped from your VT and Discord usernames using a key. This key will not be accessed by any of the researchers and will be deleted after the end of the Spring 2024 semester. Similarly, the stored record of your consent status will not be accessed by any of the researchers and will be deleted after the end of the Spring 2024 semester.

WHO CAN I TALK TO?

If you have any questions or concerns about the research, please feel free to contact Brendan Doney (brendandoney@vt.edu). You are not waiving any legal claims, rights or

remedies because of your participation in this research study. If you have questions regarding your rights as a research participant, contact the Virginia Tech HRPP Office at 540-231-3732 ([irb@vt.edu)](mailto:irb@vt.edu).