

2023-2024 Information Technology Committee (ITC) Report

To: SACUA

From: Magdalena Ivanova, Chair, Information Technology Committee

Subject: Report on Activities of Information Technology Committee for 2023-2024

Advisory to: Ravi Pendse, VP for Information Technology and Chief Information Officer

Members: Yasser Aboelkassem, James Cranford, Ivo Dinov, Magda Ivanova (Chair), Yun Jiang, Amir Mortazawi, Maura Seale, Quentin Stout, Sonia Tiquia-Arashiro, Jeffrey Yackley

Student Representatives: Luis Marques (graduate) and Varun Agrawal (undergraduate)

SACUA Liaison: Deirdre Spencer

Faculty Governance Coordinator: Ann Marshall (FSO)

VPIT-CIO Chief of Staff Mashon Allen

Meeting Dates: Five committee meetings held on 10/24/2023, 11/29/2023, 01/10/2024, 02/08/2024, 03/21/2024

Committee Charge

The ITC advises and consults the Vice President for Information Technology and Chief Information Officer on matters related to the impact and utilization of information technology at the UM. In addition, ITC had the following [2023-2024 charge](#).

Committee Actions

The general theme of the ITC meetings during the past year is the implementation, the challenges, and the opportunities of generative AI. Guest speakers: Prof. Karthik Duraisamy (GAIA Chair), Prof. Tazin Daniels (GAIA member), Prof. Brian Athey (GAIA member), and Varun Agrawal (GAIA and ITC member, undergraduate student) provided insights on AI in teaching and research, the Committee's goals, and key findings on issues like academic freedom and ethical considerations. Following the meeting with GAIA committee members, ITC members discussed the charges, usage ethics, privacy and accessibility, and reliability of information. The Committee made recommendations regarding U-M's approach to GenAI costs and providing a grace period for testing. Specifically, we talked about using Maizey as an aid for instructors and a tool for providing reliable information to the students. Per our discussion, VP Ravi Pendse and his team extended the deadline for the free trial of the Maizey until the end of the summer.

The second theme subject to ITC discussion of cyber security and hygiene, in particular in relevance to the usage of generative AI, gaining valuable input from VP Ravi Pendse and his team Sol Bermann, the Executive Director of Information Assurance and Chief Information Security Officer for UM, and Bob Jones, the Executive Director of Emerging Technology and

Support Services at U-M's Information and Technology Services. During the meeting on cyber hygiene, topics included discussing potential plans for desensitizing Michigan Medicine EHR data, current cybersecurity trends, the security risks posed by GenAI, and ways to enhance its security. The discussion also touched on cybersecurity regulations and compliance, as well as initiatives related to AI integration into educational platforms like Canvas and enhancing AI's effectiveness in teaching. Utilization of resources like the U-M Safe Computing website and other ongoing initiatives to promote cyber hygiene awareness among faculty and students was also mentioned.

The third theme was regarding high-performance computing resources, charges, and funding. VP Ravi Pendse and Brock Palen, the director for Advanced Research Computing (ARC), were guest speakers at this meeting. The meeting focused on ARC-ITS Infrastructure with Brock Palen, covering topics such as an overview of computing infrastructure at UM, consulting services offered by ARC, advancements in research computing technologies, upcoming initiatives, and potential integration of AI with Canvas CMS. Discussions also touched on regulatory constraints on data, the use of Deep Blue for the library, encouraging faculty to apply for NSF data funds, and addressing challenges with GDrive partitions for UM Research Cores. Specifically, the committee members talked about the impact of software and data storage changes on the faculty's workflow.

The fourth theme focused on data storage, such as Google Drive storage limits and Kaltura storage. Data relocation challenges and challenges associated with usage disparities were discussed during the meeting—some faculties use large amounts of data while most are within the limits. VP Ravi Pendse clarified the process of usage charges for data storage and Gen AI.

Information Obtained

Throughout the academic year, the committee reviewed several topics regarding information and technology.

1. Implementation, challenges, and opportunities of gen AI, focusing on the applications of gen AI as an aid in teaching, text writing (paper and grants writing), literature mining, and research (coding and data analysis) while also addressing concerns about privacy and plagiarism.
2. Cyber hygiene focusing on the use of generative AI and the impact of generative AI on cybersecurity, privacy, and ethical considerations.
3. High-performance computing resources, consulting services, and advancements in research computing technologies
4. Data storage challenges, including Google Drive limits, data relocation issues, and software changes' impact on faculty workflows.

For these discussions, guest speakers from GAIA Committee (Prof. Duraisamy, Chair; Prof. Daniels, member; Prof. Athey, member; and Varun Agrawal was very helpful in clarifying gen AI policies and summarizing GAIA Committee findings.

VP Ravi Pendse and his team members, Sol Bermann, Bob Jones, Brock Palen, and Mashon Allen were very helpful in clarifying all topics regarding the information and technology implementations at UM.

The concerns raised by the committee were related to charges and costs associated with generative AI and data storage. VP Ravi Pendse clarified the process of usage charges for data storage, emphasizing the need for faculty to be aware of these costs and the impact of software changes on their workflows. A specific example was the charges associated with Maizey, a gen AI-based teaching tool for instructors and students. Per our discussion, VP Ravi Pendse and his team extended the deadline for the free trial of the Maizey until the end of the summer.

Recommendations

Recommendations for the next year's meetings include:

1. Continued discussions on GenAI tools and data storage, particularly focusing on addressing the challenges regarding GenAI application in various disciplines, the need for clarity in distinguishing AI-generated content in educational settings, and the reliability of the information.
2. Strategies to mitigate the impact of upcoming costs related to U-M GenAI tools, such as providing a grace period for testing, offering baseline GenAI services for all faculty, and implementing transparent cost structures to support faculty decision-making regarding GenAI utilization.
3. Address the data storage challenges, including Google Drive storage limits, Kaltura storage, and data relocation issues, with a focus on enhancing accessibility, efficiency, and cost-effectiveness for faculty and research activities. The size of all GDrive partitions for individual faculty, labs, or centers are all the same (250GB). Does this make sense?
4. It's time to bring UM instruction into the AI age: <https://www.instructure.com/en-gb/resources/blog/automatic-question-generation-using-open-ai>
5. Continuation of efforts to promote cyber hygiene awareness among faculty and students while ensuring privacy, security, and ethical considerations are prioritized.
6. Consider addressing emerging EHR issues such as desensitizing Michigan Medicine EHR data, exploring regulatory requirements related to EHR data.