COMMITTEE ON INFORMATION TECHNOLOGY
Annual Report 2023-24

To: Academic Senate, Santa Cruz Division

The Committee on Information Technology (CIT) is charged with advising on acquisition, implementation, utilization, and impact of instructional technology, information systems, software, and electronic communication facilities, including wireless service. The 2023-24 academic year was largely focused on providing guidance to the administration and the University of California, Santa Cruz (UCSC) community regarding university and systemwide IT issues, including issues regarding the campus's Google contract, while the spring quarter was dominated by two urgent and late-breaking systemwide issues: the Regents' several proposals for policies on Departmental Statements, and President Drake's letter on cybersecurity.[1] CIT also co-sponsored a public forum on Artificial Intelligence and Teaching in partnership with UCSC's Teaching and Learning Center (TLC) in winter 2024. Representatives from CIT additionally served on the University Committee on Academic Computing and Communications (UCACC), and the UCSC Canvas Steering Committee. Summaries of major work may be found below.

VCIT Standing Guest Consultations

This year, CIT continued its tradition of inviting the Vice Chancellor of Information Technology (VCIT) as a standing guest at a segment of each of our bi-weekly meetings. In 2023-24, VCIT Aisha Jackson updated the committee on many Information Technology Services (ITS) activities, including the rollout of campus IT governance committee charters and workflows, updates on the campus transition to an offsite colocation facility for faculty hardware, changes in the Google storage contract, and systemwide changes in the University of California Office of the President's (UCOP) cybersecurity management plan. VCIT Jackson spent part of the winter and spring quarters on leave. During her absence, CIT continued its standing guest consultations with Interim VCIT (iVCIT) Melanie Douglas.

As has been the case since VCIT Jackson's arrival to UC Santa Cruz in August of 2022, CIT found these consultations to be an invaluable part of shared governance. CIT appreciates the opportunity that these standing guest consultations provide for both the committee and the VCIT to discuss pressing issues, brainstorm solutions, and provide informal feedback on proposed plans and projects. We look forward to further collaborations with VCIT Jackson in 2024-25.

IT Governance

CIT has been informed that VCIT Jackson is implementing four steering committees and an overarching IT governance council as described on the [ITS Governance website.](#)[2] The roll-out of some of these committees was delayed due to the VCIT's leave, but will continue over the fall and into the 24-25 academic year. The following committees have and/or will be created:

- IT Executive Committee: the top-level body for campus IT governance. This committee will be populated next academic year, and the VCIT has been advised to request that the

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[1] UC President Drake to Chancellors, 2/26/24, Re: IT Security Investment Plan
[2] ITS Governance Website: https://its.ucsc.edu/governance/index.html

Senate's Committee on Committees (COC) be asked to appoint faculty Senate representation on this committee.

- Research Computing and Data Infrastructure Committee (RCDI):[3] has already been constituted and includes CIT and Committee on Research (COR) representatives, plus additional faculty at large. The RCDI formed three working groups in 2023-24: a software licensing subcommittee (with CIT Member Jerome Fiechter serving), a new faculty IT orientation group, and a group tasked with building a hardware inventory of all ITS supported research commuting devices on campus.
- Technology-Enhanced Teaching and Learning Advisory Committee (TETL):[4] has already been constituted, with reps from CIT, the Committee on Teaching (COT), the Committee on Educational Policy (CEP), and the Committee on Planning and Budget (CPB). The primary focus of this committee has been evaluating requests and recommending campus support for software associated with teaching, learning, and student accessibility. As ITS does not have a budget for such purchases, the recommendations are advisory, and aimed at encouraging campus leadership to support the computational tools necessary for teaching and learning.
- IT Systems and Data Governance Committee:[5] has already been constituted, and currently has no Senate representation. This committee is focused on administrative issues.
- IT Security Council:[6] has been proposed, and there is a placeholder for a faculty representative on the draft charter. As this committee is generally focused on campus compliance and legal issues, CIT suggested to the VCIT that the Senate's COC appoint a faculty representative on this committee.

We spent the final two spring CIT consultations with VCIT Jackson discussing President Drake's February 26, 2024 letter on cybersecurity. ITS is moving forward with strategizing how to implement the IT security mandates provided in the letter. Due to the imposed timeline for compliance, the VCIT and her team will need to actively keep working on the project throughout the summer and cannot wait until the Senate is back in session in the fall to request Senate consultation/feedback.

In lieu of official Senate consultation, VCIT Jackson has informed CIT that she would like to create a faculty advisory group that can provide feedback on initial plans during the summer. CIT has advised that she should contact the Academic Senate Chair so that COC can populate this committee as soon as possible. Given the history of IT decisions that have been made on our campus without proper Senate consultation, CIT contends that it is vitally important that this summer advisory committee be well populated with Senate members who are currently serving on committees and in the know of Senate priorities. CIT Member Mathis Hain has volunteered to serve in this capacity.

Senate Forum on Artificial Intelligence

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[3] UCSC Research, Computing, and Data Infrastructure Committee: https://its.ucsc.edu/governance/research-data.html
[4] UCSC Technology-Enhanced Teaching and Learning Advisory Committee: https://its.ucsc.edu/governance/teaching-learning.html
[5] UCSC IT Systems and Data Governance Committee: https://its.ucsc.edu/governance/it-systems-data.html
[6] ITS Security Council: https://its.ucsc.edu/governance/it-security.html

On February 28, 2024, CIT presented a forum dedicated to Teaching in the Age of Generative AI as part of the UCSC Teaching Week Symposium, co-sponsored by the Teaching and Learning Center (TLC) and the Academic Senate. The forum was facilitated by CIT Chair Zimmer and Michael Tassio, Assistant Vice Provost for Educational Innovation. The event was held via Zoom, and the video is available online: https://youtu.be/NQ0s2JhE6tQ?feature=shared.

In the first part of the presentation, the TLC's Teaching with Generative AI Learning Community (co-facilitated by Zimmer and Tassio, and including participation of Senate faculty, lecturers, and staff) showcased their findings and successes in integrating large language models into their teaching practice. CIT Graduate Student Representative (GSR) Lance Mendoza, presented a survey designed by Representative Mendoza that provided insight from UCSC graduate students about their perspectives and experiences with AI and learning. In the second part of the forum, Professor Zimmer moderated a conversation with faculty experts Professors Luca de Alfaro and Marcelo Siero to discuss how Generative AI has changed our ability to understand and interact with modern computational systems.

Google Storage

CIT received several briefings[7] and requests for feedback on the Google Storage Project,[8] beginning in the winter of 2023. In February 2021, Google announced changes to Google Workspace for Education, which included an end to unlimited free storage. UC Santa Cruz was able to negotiate a two-year extension with plans to adopt new storage limits by July 1, 2024. The campus Google Storage Project aims to align our campus with the new storage limits. The committee had fruitful conversations with iVCIT Douglas and VCIT Jackson about the project, and followed up with written correspondence responding directly to several ITS queries. The Project has since been rolled out across the different campus constituencies, and seems to be going smoothly.

Data Center Strategy

With the transition to the off-site colocation data center now fully implemented, CIT has taken a more monitoring oriented position. Through consultation with VCIT Jackson, CIT assisted ITS in the development of a detailed FAQ document[9] pertaining to the deployment/migration of high-performance computing (HPC) equipment to the colocation facility (lead times, costs, network limitations, etc.), and ensured that this information is readily accessible to PIs on the ITS website. CIT also recommended that the existence of this important FAQ document be broadly advertised to faculty and staff relying on HPC resources for their research.

VPN and Cybersecurity

One topic CIT has been tracking is the transition to Virtual Private Network (VPN)-only remote access to computer systems hosted on the various campus networks, following up on previous concerns raised by a group of Computer Science and Engineering (CSE) faculty.[10] CIT views "network openness" and "network security" as fundamental aspects of academic freedom and

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[7] Standing Guest Consultations with iVCIT Douglas on 4/03/24, 4/17/24, and VCIT Jackson on 5/29/24.
[8] UCSC Google Storage Project: https://its-new.ucsc.edu/projects/google-storage-limits.html
[9] Communications Building Data Center Migration FAQ: https://its.ucsc.edu/projects/data-center-faqs.html
[10] Alvaro, Arden, et al., 6/06/22, Re: Network Security Policy Changes at UCSC

integrity, respectively and is pleased that a compromise was found that greatly improves the cybersecurity of our campus, while also maintaining the possibility for faculty to host computer systems in a separate "demilitarized zone" (DMZ) network for the explicit purpose of fostering collaboration with partners outside our university. In fall 2023, CIT discussed the 2021 roll out with VCIT Jackson, who reported that the VPN system stood up to the increased data traffic, apparently without any disruption to service. This successful roll-out of network policy builds on the productive consultations on the topic with VCIT Jackson during the 2022-23 academic year to deliver enhanced cybersecurity without compromising the openness of our academic community.

The issue of cybersecurity and network policy changes came again to our docket by way of the February 26, 2024 letter by UC President Drake regarding the "UC Updated Information Security Investment Plan",[11] mandating a number of cybersecurity enhancements to be implemented on an expedited timeline by campuses system wide. These include:

1. Cybersecurity training compliance
2. Cybersecurity incident reporting
3. Tracking of devices connected to university networks with end-point detection and recovery (EDR) software
4. Multi-factor authentication and data-loss-prevention for UC health email systems

CIT views points 2 and 4 as innocuous and generally aligned with the cybersecurity needs of the UC community and UC patients, but points 1 and 3 as well as the expedited timeline raised some immediate concerns among CIT members. In our consultation on May 1, 2024, CIT was briefed by VCIT Jackson, AVCIT Douglas and AVCIT Hall on the UCSC implementation plan and timeline for the mandated cybersecurity enhancements. These include:

1. A 12-week assessment period ending mid-September, followed by a year-long implementation process.
2. The idea to implement a Zero Trust Network Access (ZTNA) model at UC Santa Cruz

CIT provided feedback with important and specific points of discussion in a post consultation memo[12] and then again in consultation with VCIT Jackson on May 15, 2024. For example:

- We considered the distinction between the Eduroam, ResNet and university networks subject to the training-compliance and EDR mandates.
- We considered network access of graduate and undergraduate students that may fall under the training-compliance mandate as part of their student worker roles, and how the mandated cybersecurity training could be improved to better cater to the diverse training needs of our community.
- We considered the technical capabilities of the mandated EDR software to (a) track web traffic, and (b) remotely access and erase data on devices, and implications for privacy of personal and research data and communications. Current cybersecurity training recommends to "stop, look and think" when instructed to install any external software on our personal devices, and as of now there is no training available for community members to understand the UC EDR deployment standards referenced in President Drake's letter.

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[11] UC President Drake to Chancellors, 2/26/24, Re: IT Security Investment Plan
[12] CIT Chair Zimmer to VCIT Jackson, AVC Douglas, and AVC Hall, 5/14/24, Re: Our Consultation on May 1, 2024

- We considered current IT resources and services accessible through Multi-Factor-Authentication (Duo MFA) such as the Canvas LMS, UCSC GitLab, Cisco AnyConnect VPN, and effectively all research computing that happens on our campus. There is a significant business-continuity case for community members to be informed about how the UC EDR deployment standard applies to their ecosystem of devices and private cloud resources. CIT deeply appreciates that broad-based outreach and change-management are priorities of VCIT Jackson in scoping and planning the UCSC network landscape to meet the President's mandate, with the goal to minimize disruption to our shared endeavor, uphold academic freedom and champion individual privacy rights.

Trust is a critical concept in cybersecurity, and in deliberation CIT concluded that a zero-trust network (ZTNA) is indeed a critical component to our shared cybersecurity. At the same time, it is best cybersecurity practice that individuals use judgment when deciding if they trust EDR software on devices that contain personal and/or private information. VCIT Jackson's invitation to form a working group with Senate faculty representation during summer 2024 is driven by the need to comply with the implementation timeline mandated by the President, and CIT is grateful for the opportunity for Senate faculty to contribute to both the scoping and planning of the mandated network policy changes. Further, CIT is hopeful that continued engagement with Senate faculty will play a constructive part in finding solutions and shaping campus cybersecurity policy to meet our needs to have public-facing IT services, personal privacy, academic freedom, and cyber-secure core functions of the university. CIT's primary recommendation in this evolving situation is to (i) communicate early and clearly with different groups of community members about upcoming cybersecurity policy changes that may affect their access to IT services and resources, (ii) develop policy and training regarding UC EDR deployment standards clearly delineating the purview of the EDR mandate, and (iii) respect the personal privacy and academic freedom of scholars on our campus.

Regents' Policy on Departmental Statements

During the winter and spring 2024 quarters, CIT discussed and responded to several iterations of the UC Regents' proposed Policy on Departmental Statements. In all of our correspondence, we encouraged the Regents to carefully consider the June 2, 2022 letter from the Chair of the Academic Council,[13] which describes the Academic Council's recommendations for department political statements. In addition to broad concerns with the proposed policy CIT shared with other Senate committees, CIT members also highlighted the fact that the implementation of this unfunded policy will be taxing on Information Technology (IT) staff and resources that are already overburdened.

UCSC Website Redesign Project

CIT had requested that ITS Digital Program Manager Adam Hills-Meyer give an update on the UCSC Website Redesign Project in the winter quarter. Due to the pressing nature of the Regent's

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[13] Council Chair Horwitz to Academic Senate Division Chairs, 6/02/22, Re: Recommendations for Department Political Statements: https://senate.universityofcalifornia.edu/_files/reports/rh-senate-divs-recs-for-dept-statements.pdf

proposed policy on departmental statements, Manager Hills-Meyer's consultation was canceled, and CIT turned its focus to responding to the proposed policy. This year's CIT recommends that next year's committee invite Manager Hills-Meyer to consult with CIT in early fall quarter 2024, to provide an update on UCSC's proposed Terms of Use document for campus websites.

Automatic License Plate Reader Program

During the fall 2023, CIT reviewed the request for feedback on a proposed campus policy on Automated License Plate Readers (ALPR) in preparation for the Transportation and Parking Services (TAPS) implementation of ALPR in summer 2024. CIT requested justification for the adoption of ALPR and information about policies (e.g. image acquisition and storage, and non-TAPS use of ALPR data), and noted the potential social costs of ALPR, including increased vulnerability to misuse of personal data, actual or perceived targeting of undocumented students and members of minoritized groups, and chilling of free speech and labor related activity on campus.

The response to the Academic Senate from the Chief Financial Officer & Vice Chancellor for Finance, Operations, and Administration Ed Reskin stated that "some of the operational standards are yet to be developed."[14] CIT members find migration to ALPR prior to the development and review of rigorous quality controls, privacy protection protocols, and audit procedures to be troubling. The committee perceives a risk that members of the campus community, including those who have not opted into the TAPS parking system, may be vulnerable to misuse of data collected by ALPR cameras. We suggest that CIT continue to monitor the roll-out of ALPR next year.

Postmortem Email Access

In winter 2020, CIT received a request from the Committee on Emeriti Relations (CER) inquiring about the feasibility of creating a campus policy that would allow a faculty member to authorize one or more individuals to access their UCSC email account after death, akin to the legal status of an executor with respect to the UCSC email account.

After several consultations in 2021-22, CIT was advised that campus leadership had charged a working group with addressing the issue, and that a policy proposal would be forthcoming for Senate review. CIT had expected to see a formal request for review in fall 2022, but no such request materialized, nor did the working group produce a final report.

In April 2023, the VCIT informed CIT that the CPEVC had denied a resource request from legal counsel to implement automated eDiscovery for documents and correspondence, and ITS does not currently have the resources to do so themselves.

Given that there has been no movement on this question, and in service of avoiding an ongoing lack of (or ad hoc approach to) a policy on postmortem email, we recommend that subsequent incarnations of CIT continue to inquire about this matter and monitor any potential movement by ITS and/or the administration. It is possible that current or future thinking on this matter may be folded into evolving campus policy about post-employment email and Google drive access. This

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[14] VCFOA Reskin to Senate Chair Gallagher, 1/27/24, Re: Senate Feedback on Proposed Policy on Automated License Plate Readers

might be an unfortunate conflation of concerns and rob this committee and the Senate of an opportunity to help shape aspects of policy specific to postmortem email access.

Acknowledgements

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Respectfully submitted,

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