**COMMITTEE ON INFORMATION TECHNOLOGY**
**Annual Report 2022-23**

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 2022-23 academic year was largely focused on providing guidance to the administration and the UC Santa Cruz (UCSC) community regarding university and systemwide IT issues, including several new Information Technology Services (ITS) strategies rolled out under the guidance of UCSC's new Vice Chancellor of Information Technology. Summaries of major work may be found below. Representatives from CIT additionally served on the University Committee on Academic Computing and Communications (UCACC), and the UCSC Canvas Steering Committee.

## I.        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. VCIT Aisha Jackson joined UCSC in August 2022. In 2022-23, VCIT Jackson updated the committee on many Information Technology Services (ITS) activities, including proposed IT governance committee charters and workflows, plans for moving computer hardware to the offsite colocation facility, the UCSC website redesign project, and policies for post-mortem access to faculty email.

This year in particular, 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 2023-24.

## II.        Website Redesign Project

At the beginning of the academic year, one of the first topics Vice Chancellor for Information Technology (VCIT) Aisha Jackson brought to CIT was a comprehensive assessment of the current state of the campus website redevelopment project. In November 2022, VCIT Jackson invited Vice Chancellor for University Relations (VCUR) Mark Delos Reyes Davis, and Associate Vice Chancellor of Experience Strategy and Design (AVC) Phyllis Treige, key members of the teams working on the redesign. They shared details on a major change in direction of the project adopting WordPress as the content management platform. While CIT recognizes our limited contribution to this and previous project decisions, we very much welcome the renewed engagement on this important topic and we broadly concur with the rationale presented for the decision to use WordPress. In these meetings the website development team also shared details on the institutional goals with regard to undergraduate recruitment, and considerations as to how to produce a quality experience for different groups of visitors to our campus main website. As part of these efforts CIT reviewed the design and implementation plan for a website visitor survey, and provided encouraging feedback with the caveat that there may be biases in participation rates that should

preclude quantitative analysis of the resulting data unless these biases are statistically controlled for. CIT continues to encourage shared governance and requests for stakeholder feedback during future phases of the project's implementation and roll-out.

As part of our consultation on the campus main "landing page", CIT raised a number of questions about implications for divisional, departmental, and other unit's websites. These issues relate to two primary areas: (1) What support will campus units have in the development, administration, and maintenance of unit websites? (2) What steps are taken to ensure cybersecurity and data integrity on unit websites? We were briefed on plans for a staff development project, as appropriate when adopting a new technology for mission-critical functions in education, research and internal communication–with many stakeholder groups involved. CIT encourages that lessons learned from the development, administration, and maintenance of the campus main website be collected in a best practices document for units to follow in their website development plans. Such a document could include streamlined channels for units to access campus IT resources as well as a basic set of website governance rules and standards.

## III.    Data Center Strategy

A transition to a colocation facility (colo) is underway to meet existing and projected demand for high performance computing (HPC) research on campus. The first phase of the transition included primarily ITS and administrative systems. The next phase of the transition will more directly impact faculty and PIs with HPC equipment currently hosted on campus. In 2021-22, CIT recommended the formation of an ad hoc committee to overview the transition and set guidelines for, among others, which equipment should be hosted at the colo facility, how long the equipment can stay at the facility, and the costs of services for equipment hosted at the facility. In response to this request, incoming VCIT Jackson has formed the Research Computing and Data Infrastructure (RCDI) Committee. CIT has reviewed the proposed membership roster for the committee and deemed that academic/research and Senate representation was adequate. Membership of the RCDI Committee includes a representative from CIT, which will guarantee that CIT stays informed about the relocation processes, and has the opportunity to provide feedback and guidance through its regularly scheduled consultations with VCIT Jackson.

## IV.    VPN Security Restrictions

UCSC introduced a new virtual private network (VPN) policy in 2021 that requires VPN login for utilizing virtually all servers and UCSC IT services. The goal of this approach is to improve campus ITS security. However, several Computer Science and Engineering (CSE) faculty have raised concerns[1] that it also introduces a significant burden while rendering certain operations impossible.[2] The following concerns were raised:

- The VPN does not necessarily improve security. A compromised system within the VPN can access all systems.
- The VPN uses closed source software, which from a security perspective is questionable.

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[1] Alvaro, Arden, et al., 6/06/22, Re: Network Security Policy Changes at UCSC
[2] Arden, Beamer, et al., to Interim VCIT Walker, 6/06/22, Re: Recent Policy Changes Regarding Network Security at UCSC

- The VPN is slow and burdensome, and alternative techniques such as secure socket shell (SSH) passwordless login or multi-factor authentication (MFA) provide the same security while delivering higher performance.
- The current VPN system is inefficient, slow, and introduces a potential security issue as it routes all user traffic through the UCSC VPN. Services unrelated to UCSC, such as web browsing, should not need to go through the VPN.
- The VPN eliminates the option to expose servers to the internet which precludes many collaborations where an outside party needs to receive access a server hosted within the UCSC network.
- Services such as Canvas can still be accessed from outside of the VPN (and hence are apparently fully trusted) which is critical as those host sensitive student records. It is unclear which services are defined as trust-worthy and which ones are not by ITS.

VCIT Jackson provided a response to the letter of concern,[3] which was discussed by CIT, stating that the security benefits outweigh the negative impacts. It is CIT's view that more direct dialogue is needed between the stakeholders in CSE and ITS. We appreciate, on the one hand, ITS' desire for a uniform security policy across all computing resources managed by UCSC, while on the other, we recognize the concerns raised by members of the CSE department that research computing resources are different than those dedicated to instructional or administrative concerns, and that blanket policies can be restrictive on research computing. Clearer articulation of policies regarding approval of exceptions including private Virtual Local Area Networks (VLANs) and research Demilitarized Zones (DMZs) will be essential for informed buy-in from faculty. In the spirit of open dialogue, CIT has recommended that this begin with a meeting between stakeholders in CSE and representatives of ITS.[4]

## V.    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. The membership of this working group, which was convened before VCIT Jackson joined UCSC, included Gennevie Herbranson, Hudson Smith, Leslie Geary, Brian Hall, and Troy Wright. 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.

CIT regularly asked for updates on the draft policy during our consultations with VCIT Jackson over the course of 2022-23, and the VCIT is aware of the importance of the issue. In April 2023, the VCIT informed the committee 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. As the principle challenges (academic freedom,

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[3] VCIT Jackson to Members of CSE Faculty, 3/23/23, Re: CSE Letter Regarding ITS Security Requirements
[4] CIT Chair Alvaro to VCIT Jackson, 7/05/23, Re: Concerns Regarding Security Restrictions on VPN

privacy considerations, university IP concerns, Ediscovery) are beyond the scope of IT procedures, CIT believes the issue should be redirected to the Senate Executive Committee.

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Respectfully submitted,

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