UNIVERSITY COMMITTEE ON ACADEMIC COMPUTING AND COMMUNICATIONS

ANNUAL REPORT 2023-2024

TO THE ASSEMBLY OF THE ACADEMIC SENATE:

The University Committee on Academic Computing and Communications (UCACC) is charged in Senate Bylaw 155 to represent the Senate in all matters involving the uses and impact of computing and communications technology and advise the President concerning the acquisition, usage and support of computing and communications technology and related policy issues. UCACC held four regular meetings via videoconference and one 1-hour special meeting to discuss a response to a request for feedback. In 2023-24, UCACC's primary topics of discussion included cybersecurity, artificial intelligence, and data storage. Members shared information from their campuses and engaged with administrators at UCOP. This report highlights the committee's discussions and activities during the year.

Digital Risk Management and Cybersecurity

At the beginning of the year, UCACC heard from Vice President and CIO Van Williams about a "digital risk appetite statement" that would be included in the materials that the Board of Regents is asked to approve each year. The statement, which was approved by the Regents in March, defines UC's digital risk and creates a minimum standard that campuses can adapt to their individual needs. UC CIOs, CISOs, and campus risk management leaders meet regularly to discuss key cybersecurity metrics, including endpoint monitoring, financial investment, number of systems on the network, and number of systems with high-risk vulnerabilities. Other metrics include incidents with third party vendors, endpoint encryption percentage, awareness training compliance, and number of enterprise systems that have conducted backup system testing in the last 12 months. Cyber risks include ransomware, social engineering, data leakage from emails that transmit private information, third party risks, and software obsolescence.

In March, UCACC members were alerted to a letter to chancellors from President Drake that seemed to require endpoint detection and response (EDR) software on all computers, multifactor authentication (MFA) on all email systems, and 100% compliance with cybersecurity training. UCACC had many concerns with the letter, including the unrealistic compliance demands and encroachment into faculty self-governance. UC has employed an endpoint threat detection program since 2016 that functions like a networked antivirus system and can reside on a server or laptop. However, UCACC members feel that the requirement for endpoint detection on cell phones and other devices that are not university owned or controlled is inappropriate and overstepping. The committee had previously been told that UC's security goal was to make sure that the most critical areas have appropriate control levels, not to protect everything against every possible threat. UCACC enumerated its concerns in a letter to the Academic Council that was then transmitted to President Drake and his staff. Unanswered questions remain regarding the implementation of the directives, and UCACC hopes to hear more in the coming academic year from UCOP administrators and from campus reps about local discussions regarding the mandate. In July, UCACC provided comments to the administration on draft "standards" for the implementation of MFA and EDR systems.

Artificial Intelligence

UCSF representative Duygu Tosun-Turgut served as the Academic Senate's representative to the UC Council on Artificial Intelligence (AI), a systemwide group appointed by the president and co-chaired by UCSF Professor Alex Bui and UCOP Chief Compliance Officer Alex Bustamante. Dr. Tosun-Turgut provided updates about the work of the AI Council at each meeting and, in December, two executives from UC's Office of Ethics, Compliance and Audit Services (ECAS) joined UCACC for more detailed updates on two of the Council's subcommittees. Systemwide Deputy Audit Officer Matthew Hicks, co-chair of the Subcommittee on Risk, and General Compliance Manager Jenny Lofthus, co-chair of the Subcommittee on Knowledge, Skills, and Awareness talked about developing materials to help campuses identify and mitigate risks related to AI, including audience-specific toolkits, training modules, and resources for support. UC has identified specific areas to target for the first stages of awareness training, including healthcare, police, HR, and student experience. At this time, most of the focus is on administrative processes, but the administration is looking for input from faculty, especially around teaching, learning, and research. UCACC members discussed how faculty are using AI for coding, gaming, pedagogy, and course feedback. Simulations and other AI technology can be used to help convey ideas in a learning environment.

UCACC also learned about the planning for the February 29, 2024, UC-wide congress on "The Impact and Promise of Artificial Intelligence" from UC Berkeley CITRIS Executive Director Camille Crittenden. The intent of the congress was in part to raise awareness of the importance of safe, ethical, and non-discriminatory AI usage among UC leadership and the UC community at large, and to identify cutting-edge research in AI in the UC system and ideas on transformative implications and applications. UC Santa Cruz representative Zac Zimmer was as a panelist for a session on Pedagogy and Innovation Frontiers.

Data Storage Concerns

UCACC discussed the loss of free unlimited data storage at some campuses, occurring across Google, Box, and Microsoft, due to contractual renewals. UCOP is interested in finding a path forward with a standardized way of providing support for research data at UC. The cost for storage will only increase, so UC needs a budget model that will accommodate the expansion. Committee members wondered if indirect cost recovery could be used to support storage and noted that increasing capacity and additional support should be tied to increased research dollars. The Research Data Backup System effort (see below) is a part of the solution but focuses solely on backup and not preservation. Responsibility for the research life cycle falls to the VC-Rs, who do not have budgets for big data solutions. Ongoing discussion between faculty and the administration will be necessary in determining how the university can best support faculty research needs.

Research Data Backup System

In October, UCOP Strategic Advisor Anne Bessman joined UCACC to provide an update on the work of the Research Data Backup System (RDBS) Steering Committee, a joint administrative/faculty group charged with finding a solution to ensure that research data stored on personal computers is not lost in the event of a breach or accidental deletion. The scope of the service is limited to storage backup. Data management and preservation are farther down the road. In addition to appropriate technological systems, faculty would also like to see resources for

supporting faculty in backing up their work. As the UCACC representative to the RDBS Steering Committee, Chair Paw U also provided updates on its progress at each meeting.

ADDITIONAL BUSINESS

Campus IT Governance Structure: UCACC updated the Campus IT Governance Structures chart (shared via Google docs) that tracks faculty involvement in campus IT governance.

Systemwide IT procurement: Senior Manager for IT Strategic Sourcing Roshni Pratap joined UCACC's October meeting to talk about UC's Strategic Sourcing enterprise. The IT Strategic Sourcing group works with its stakeholders to aggregate UC demand for technology to reduce costs. UCACC Vice Chair Jenson Wong served for the second year as the Senate's liaison to the IT Sourcing Committee.

Central Risk Unit: UCACC learned about a new central cyber risk unit that is being formed at UCOP to try to streamline risk assessment activities, including the vendor risk assessments that have become so burdensome. The plan is to have a central repository and systemwide methodology. UC will consider exemptions for low-risk suppliers.

IT Survey: Committee members briefly discussed whether there was interest in a systemwide survey to determine faculty priorities for software licenses. UCSC conducted a survey a few years ago that focused on high performance and co-location needs. It was noted that any such survey should come from the faculty/Senate, but in the end there was little interest in undertaking a systemwide effort.

Systemwide and campus updates: UCACC devoted part of each regular meeting to discussing systemwide issues as reported by Academic Senate leadership and reports from campus representatives on individual campus activities and concerns.

SYSTEMWIDE REVIEWS AND CORRESPONDENCE

- UCACC Comments on Proposed Regents Policy on Use of University Administrative Websites, memo to Academic Council Chair James Steintrager (March 8, 2024)
- UCACC Response to February 26, 2024, Letter from President Drake Regarding Information Security Investment Plans, memo to Academic Council Chair James Steintrager (May 15, 2024)
- UCACC Feedback on EDR Draft Standard, memo to Interim Chief Information Security Officer Monte Ratzlaff (July 12, 2024)
- UCACC Feedback on the MFA Draft Standard, memo to Interim Chief Information Security Officer Monte Ratzlaff (July 12, 2024)

REPRESENTATION

UCACC Chair Kyaw Tha Paw U, served as a faculty representative to the CIO Council (formerly the Information Technology Leadership Council) and as an *ex officio* member of the University Committee on Library and Scholarly Communications (UCOLASC). Chair Paw U also served as Senate representative to the Cyber-Risk Governance Committee (CRGC) and represented UCACC on the Research Data Backup System (RDBS) Steering Committee. UCSF representative Duygu Tosun-Turgot served as the Academic Senate liaison to the UC Artificial

Intelligence (AI) Council and Vice Chair Jenson Wong served as liaison to the systemwide IT Sourcing Committee.

ACKNOWLEDGEMENTS

UCACC is grateful for the contributions made by the consultants and guests who attended meetings in 2023-24, including:

- Anne Bessman, Interim Strategic Programs Manager for Research and Innovation
- Camille Crittenden, Executive Director, CITRIS, UC Berkeley
- Matthew Hicks, Systemwide Deputy Audit Officer, UC Office of Ethics, Compliance and Audit Services
- Jenny Lofthus, General Compliance Manager, Office of Ethics, Compliance and Audit Services
- Monte Ratzlaff, UC Cyber-Risk Program Director and Interim UC Chief Information Security Officer
- Roshni Pratap, Senior Manager for IT Strategic Sourcing, UC Procurement Services
- Van Williams, Chief Information Officer and Vice President for Information Technology Services

RESPECTFULLY SUBMITTED,

Kyaw Tha Paw U, Chair (UC Davis)

Jenson Wong, Vice Chair (UC San Francisco)

John Kubiatowicz (UC Berkeley)

Cristiana Drake (UC Davis)

Paul Gershon (UC Irvine)

Matthew Fisher (UCLA)

Emily Jane McTavish (fall), Lisa Yeo (spring) (UC Merced)

Ilya Brookwell (UC Riverside)

Barry Grant (UC San Diego)

Duygu Tosun-Turgut (UC San Francisco)

Frank Brown (UC Santa Barbara)

Zac Zimmer (UC Santa Cruz)

Jamie Hindery, Undergraduate Student (UC Santa Cruz)

James Steintrager, Chair, Academic Senate (Ex Officio)

Steven Cheung, Vice Chair, Academic Senate (Ex Officio)

James Bisley, CCGA Vice Chair (Ex Officio)

Mark Hanna, UCOLASC Vice Chair (Ex Officio)

Joanne Miller, Committee Analyst