

## **INFORMATION AND COMMUNICATIONS TECHNOLOGY COMMITTEE**

### **ANNUAL REPORT 2016-2017**

The committee met six times in 2016-2017.

In October, CUIT Director Gaspare LoDuca gave an update on various CUIT initiatives. Research is underway for a new phone system to replace the thirty-year-old ROLM system; a new “soft” system will allow university students and employees to receive calls to university numbers on their own phones. The new system should include telephony, text, video and chat applications, so that users can in effect turn their offices into classrooms. In another project, CUIT was developing sites.columbia.edu, a set of Drupal-based templates from which offices can build their own sites conforming to Columbia’s overall design.

At the November meeting, Associate Provost for Equal Opportunity and Affirmative Action Heather Parlier and Associate Vice President, HR System, Planning and Operations Elizabeth Braden discussed RAPS (Recruitment of Academic Personnel System), which the university uses. Unfortunately, while there was an initiative to update RAPS, this project was stopped when her predecessor left and she was herself at the time quite new. There was no information as to when modifications could be expected, although there is considerable faculty unhappiness with the current system, which remains unchanged. Ms. Parlier also answered questions about recruiting women for various positions when few of them apply. She is also helping departments to understand “unconscious bias” as part of the EOAA mission.

In December, Paul Reedy, Assistant VP, Finance Service Management; and Milca Meyer, Project Director, CUIT, reported on the recent upgrade to ARC version 9.2, which included an array of fixes and enhancements.

In February, Chris Dowden, Director, Identity and Access Management, CUIT explained (via Google Space) the new multifactor authentication system, Duo, to be used for many CUIT services. Online security is a continuing problem at Columbia and elsewhere, and it is hoped that the multifactor system will cut down on unauthorized access.

Also at that meeting, Susan McGregor, Assistant Professor of Journalism and Assistant Director of the Tow Center for Digital Journalism, presented information on GitHub, a cloud-based collaboration tool for text-based projects. It was originally used by programmers collaborating on code but academics are increasingly using it for text collaborations. It lets users see clean copy or various drafts with individual contributions. Sen. McGregor uses it for both teaching and coding. It’s increasingly popular in industry and has become a valuable skill to list on a resume. She hoped that the university would consider buying a license to make the full version available, but even the limited free version was useful for various kinds of projects.

Dawn Garrison of Gradescope was the presenter at the March meeting, speaking to the committee via Google Hangout from her office in California. Gradescope is an automated grading system. Students submit tests or assignments on paper, and these are scanned into the application. The

papers are displayed on the left half of the screen; grading rubrics appear on the right. The instructor scrolls through the papers and indicates how many points, if any, are to be deducted from the answer. Students see the full rubric so they know why they got a given score. The system works best for STEM courses or tests where yes/no or multiple-choice answers are required. There is also a feature which clusters hand-written answers (e.g. formulas) using computer vision technology so that they may also be graded in batches. Itsik Pe'er, faculty in Computer Science, has been using Gradescope and was very positive about it. CUIT will explore a Columbia license. The meeting was cut short by a fire alarm!

In April 2017, the committee heard about the forthcoming redesign of the university's home page, Columbia.edu, from Sheri Whitley, Director, Multimedia Development, and Deborah Sack, Vice President, Strategic Communication, both of the Communications and Public Affairs office, along with Krystina Casolino and Ian Mieville of CUIT. The team has extensively studied how people use the site and heard from some 1,500 users of the site about what they wanted to see. The team also showed sites.columbia.edu, a set of templates on a Drupal platform that allow Columbia offices to create their own sites easily in a design consistent with other Columbia sites.

At that meeting, the committee also saw a continuation of the presentation on Gradescope given remotely by Dawn Garrison in California. Ms. Garrison said the system could not be used for long essays but it could be used for short-answer quizzes or homework. Student papers could be scanned into the system and graded with whatever rubric the instructor defined. After a set of papers was graded, the system would show the distribution of grades and summaries of the results of any assignment. Instructors could see how many students got an answer wrong versus questions that were left unanswered when a test was too long. Instructors could create tags for concepts or outcomes and see results in tag view, to understand how many students grasped a given concept. The resulting data could be used to create accreditation reports. If enough instructors in a subject add tags to concepts, the data could save hours of work for teaching assistants.

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### Information and Communications Technology Committee 2016-2017

Ten.	Julia Hirschberg	Co-Chair	SEAS	sen
Ten.	Matthew L. Jones	Co-Chair	A&S/SS	sen
Ten.	Itsik Pe'er		SEAS	nonsen
Ten.	Henry Spotnitz		P&S	sen
Nonten.	Richard Schutzer		P&S	nonsen
Stu. Obs.	Lee Sartain		UTS	Stu. Obs.
Stu.	Ian Bradley-Perrin		SPH	sen
Libraries	Ian Beilin		Libraries	sen
Admin. Staff	Barry Kane		Morningside / Lamont	nonsen
Research Officers	Nancy J. LoIacono		Research Officers - Professional	sen
Admin.	Ellen Binder		Adm	nonsen
Admin.	Gaspare S. LoDuca		Adm	nonsen
Alum.	Stephen Negron		Alum.	nonsen