Georgia Institute of Technology

Student Computer Ownership Committee

2013-2014 Annual Report

October 21, 2014

Fall Meeting of the Faculty, Faculty Senate, & Academic Faculty Senate

<u>**Members:**</u>
Faculty: Lori Critz (Library); Roman Grigoriev (Physics); Hyesoon Kim (CS); Steve Potter (BME); Bruce Walker (Psych)

Ex-officio members: Donald Smith (Campus Services - ITG)/replacing Miles Edson (ITG); Steven McDaniel (ResNET); Dale Myers (OIT); Peter Nguyen (Barnes & Noble @ Georgia Tech)

Executive Board Liaison: Raj Vuchatu

Student Representative: Kevin Guebert

<u>**Chair**</u>: Lori Critz (Library) served as Chair of the Committee for 2013/2014.

<u>**Meetings**</u>: The Committee met on the following dates: September 4, 2013; November 22, 2013; March 10, 2014. Considerable work was also conducted virtually.

<u>**Summary**</u>:   The primary work of the Committee was the development of the 2014/2015 Student Computer Ownership Guide. The Committee determined the hardware and software requirements for undergraduate students in collaboration with the Office of Information Technology (both the OIT Technology Support Center staff and the OIT Classroom Support Group), ResNet, and Barnes & Noble @ GT. In addition to the determination of the minimum hardware and software requirements (with a two - three year life cycle) for required laptops (aka notebooks), the Committee addressed purchasing options for students, myriad campus and third party support options (including the life cycle for GT support), network connections, security issues and password guidelines, warranty recommendations, student printing options, and virus/malware protection.

The Committee determined that most netbooks and tablets (e.g. Apple iPad, Galaxy Tab and others that run on an operating system designed specifically for the device) still do NOT meet the minimum hardware requirements. They are not compatible with all the course software (e.g. CAD) and required software for incoming undergraduates. Therefore, netbooks or tablets are still not, at this juncture, a suitable substitute for a laptop (as a student's primary computing system). This will be revisited for the 2015/2016 Student Computer Ownership requirements.

Recommendations from the Committee that have been incorporated in the 2014/2015 Student Computer Ownership Guide and policy include:

- Reaffirmation of the recommendation to use the freely available options (AVG or Security Essentials for PC; Sophos for Mac) for virus/malware protection.

- Operating System requirement maintained at Microsoft Windows 7 (64-bit) as Barnes & Noble was not able to obtain windows 8 machines from their primary vendors (Dell and Lenovo) without a touch screen capability or option.

- Emphasis on cloud services as the primary Back-up device or storage - particularly Office 365 and OneDrive, which are available to all Georgia Tech students.

- Provision of additional information and guidelines for LINUX users. The SCO Committee's recommendation is for students to VIRTUALIZE Linux on their PC or MAC. It was also noted that OIT does not support Linux beyond installation issues.

- An increase in battery life requirement based on the technical standards of new laptops.

The requirements and the Student Computer Ownership Guide were presented to students as a handout and web link at FASET and other orientation programs, and are posted on the Student Computer Ownership Committee website at: http://www.sco.gatech.edu.

Respectfully submitted by Lori Critz, Chair, 2013-2014 Student Computer Ownership Committee

ADDENDUM:

HARDWARE REQUIREMENTS for 2014/2015

Students need to meet the minimum standards below. Students should also check with their school or department to determine if there are additional requirements for their course of study.

The computer should be fast enough and have enough memory and disk space to provide satisfactory performance over a usable life of at least two to three years. All student computers should have the following components:

Form Factor: Notebook. (A netbook or tablet should not be used as the primary computing device.*)
                           A minimum of 4 hours of battery life is required.
Processor: 64 bit Multi-core processor or better.**
Memory: 8 GB or more. For best performance, we recommend that you install as much memory
                           as affordable at the time of purchase.
Primary Hard Drive: 128GB solid state drive or 250GB hard disk drive as the minimum hard drive storage
                           capacity.
                           Note: It is advisable that you get as large a hard drive as is financially feasible. Also
                           check with your school/department to determine if greater storage capacity is
                           needed.
Backup Device or Service: For local backup, an external hard drive with double the size of the internal
                           hard drive or a subscription to a cloud based backup solution like Crashplan is
                           needed.
                           Having a quality backup of your important files is vital to your success as a student.
                           While external drives are acceptable forms of backup, cloud based solutions are also
                           an excellent alternative. A quality backup service will run continuously as you work
                           and will back up your documents to a cloud based storage location. Even if your
                           laptop becomes unavailable due to loss, theft, or physical failure, the files will have
                           been saved and are fully recoverable. The cloud based backup will be accessible from
                           any computer with an internet connection.
Networking: Dual-Band (2.4 GHz/5 GHz) Wireless 802.11n capable.
Recovery options: It is highly recommended that all computers include a recovery partition or recovery
                           utility that allows quick restoration of the factory image should a re-installation be
                           necessary. If the system does not have a recovery partition, then students should have
                           their software media with them in the event a re-installation is necessary. *If you have
                           questions, check at the point of purchase or at the Technology Support Center.*
Accessories (optional):
                           - Dongles for connecting to an external display or projection device may be required.
                           All classrooms on campus utilize VGA as the standard connectivity option for
                           projection systems and 3.5 mm or 1/8" jack for audio; and newer classrooms may
                           also have DVI and/or HDMI connections. Video adapters for notebooks, tablets or
                           other mobile devices are not provided by the Institute.
                           -An external DVD writer for ultrabooks or computers without DVD drives
                           -USB flash drive
                           -Ethernet cable (15' recommended)
                           -Laptop anti-theft cable lock
                           -A laptop with a webcam and microphone is recommended; or an external webcam,
                           as well as a USB microphone and headphones

*Note that most netbooks and tablets (e.g. Apple iPad, Galaxy Tab and others that run on an operating system designed specifically for the device) – even if they have a full keyboard - do NOT meet the minimum hardware requirements above. While they may initially provide sufficient performance for basic tasks such as web browsing or simple word processing, use of technical software in courses may not be possible.

**The use of VLab (a Virtual Lab that provides GT students a way to access 'virtual machines' on campus and use software such as MATLAB and AutoCAD from any computer with Internet access) does not diminish these requirements. (See mydesk.gatech.edu for the Citrix Access Gateway to VLab.) Your system will still need to independently support the required software.

SOFTWARE REQUIREMENTS for 2014/2015

Georgia Tech supports a standard software suite for both Windows and Mac OS X systems. Standard software minimizes software incompatibilities between students and faculty, helps meet educational goals, improves the effectiveness and timeliness of software support, and helps minimize support costs. The Office of Information Technology (OIT) and ResNet will actively support the standard software. Most titles will additionally be available for student use in the general-purpose computing clusters maintained by OIT (http://librarycommons.gatech.edu).

Students should buy software packages at the time they are needed for use in their courses; many packages are available for free at http://software.oit.gatech.edu. Students should avoid downloading software that is not needed, as this can substantially affect the performance of your computer. Removal of software from expired trials is also encouraged to maximize the operating speed of your system.

We encourage professors to use standard software. If professors choose to use non-standard software, then they will be responsible for providing software support to their students. Since the Technology Support Center and ResNet cannot support all software, if students choose to use any non-standard software, they may be solely responsible for providing support.

Students should have a record available of the license keys for all their purchased software so that these may be re-installed in the event of a serious problem or system reinstall.

The standard software suite for both Mac OSX and Windows 7 is as follows:

Windows Systems

Operating System

Microsoft Windows 7 (64-bit) or newer version.

Note: Included with new computer purchase.

Email

My GaTech (can be used with any web browser)

Note: Online at http://my.gatech.edu/. No purchase or installation required.

Data Backup

Microsoft Windows Backup

Note: Included as part of Windows 7 and newer versions. Requires external hard drive.

Optional: Gatech.crashplan.com – unlimited back-up and storage for a fee (currently 4 years/$192 for 1 computer).

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Security

The Technology Support Center and ResNet recommends and supports Microsoft Security Essentials (http://windows.microsoft.com/en-us/windows/security-essentials-download) or AVG (http://www.avg.com/us-en/free-antivirus-download) to help guard against viruses, spyware, and other malicious software.

Word Processor, Spreadsheet, Presentation Software

Microsoft Office 365 Pro Plus or OpenOffice.org
Download Office 365 Pro Plus for free (for Georgia Tech students) at https://office365.gatech.edu (For additional information see: https://faq.oit.gatech.edu/content/im-student-how-can-i-get-access-microsoft-office-365-pro-plus-free)
Download OpenOffice for free at http://www.openoffice.org.

Online Storage

As part of the Office 365 Pro Plus package, students will have access to OneDrive for file syncing and storage. (See FAQ Q25 for additional information.)

PDF Conversion Capability

Included with Office 2013 or Office 365.

Mac OS X Systems

Operating System

Apple Mac OS X 10.9.2 Mavericks or newer version (Note: Mountain Lion 10.8.5 is still acceptable at this time.)
Note: Included with new computer purchase.

Email

My GaTech (can be used with any web browser)
Note: Online at http://my.gatech.edu/. No purchase or installation required.

Data Backup

Apple Time Machine
Note: Included with Mac OS X. Requires external hard drive.
Optional: Gatech.crashplan.com – unlimited back-up and storage for a fee (currently 4 years/$192 for 1 computer).

Security

The Technology Support Center and ResNet recommends and supports Sophos, free scanning software. (See: http://www.sophos.com/en-us/)

Word Processor, Spreadsheet, Presentation Software

Microsoft Office 365 Pro Plus or OpenOffice.org or iWork Suite.
Download Office 365 Pro Plus for free (for Georgia Tech students) at https://office365.gatech.edu
Download OpenOffice for free at http://www.openoffice.org.

Windows Compatibility

Windows compatibility software is not required campus-wide. However, some classes may require the use of specific, Windows-only applications. Students in these classes choosing to use Mac OS X systems can install virtualization software (Parallels Desktop 6 or VMware Fusion 3 or Virtual Box (free)) and a fully licensed copy of Microsoft Windows 7 or newer version in order to run Windows applications; or use Apple's Boot Camp* solution to run Windows at native speed. Keep in mind that virtual machines take away from your total available RAM, this is why we recommend a minimum of 8GB. (*Apple will be dropping support for Windows 7 on Boot Camp.)

LINUX Operating Systems

The Office of Information Technology recommends that students who need to use Linux for class assignments carefully consider which distribution of Linux they will install. For the best experience possible, OIT recommends students stay with Ubuntu based Linux distributions such as any of the following:

- Ubuntu
- Linux Mint
- Elementary OS

These distributions offer the most familiar user interface and are relatively easy to interact with.

IMPORTANT NOTE: It is highly recommended that any Linux distribution be used as a Virtual Machine and not as a multi-boot or Boot Camp environment since modifying the local partition tables may lead to unstable computer systems and have a high potential of data loss.

Respectfully submitted by Lori Critz, Chair, 2013-2014 Student Computer Ownership Committee