College of Fine Arts IT Support

What Every Faculty and Staff Need to Know

Index

The Basics

The Rest

The Basics

Greetings!

We are the College of Fine Arts IT office (CFA-IT), a branch of the Dean's Office, that supports the college by providing knowledgeable and courteous service, including software training and machine maintenance. CFA-IT also serves as the college's technology liaison to the rest of Illinois State University's technology support units.

Requesting IT Help and Support

Please use ITHelp.IllinoisState.edu , or call 438-HELP (4357) to:
- report issues with technology
- make IT requests
- find IT knowledge articles (tutorials)
- check the status of your reported issues or requests.

Using the ITHelp.IllinoisState.edu portal or calling the Technology Support Center at 438-HELP is the easiest way for you to report your issues or make IT requests without having to know which of ISU's dozens of tech support teams is the correct one for your situation.

CFA-IT and each of our staff value having deep knowledge of our departments, their faculty, and the faculty's needs. We like hearing from you and working with you! However, contacting a specific IT staff directly often leads to delays in getting support. The individual you contacted may very well be in the middle of another task, or even out of the office. If that staff member is not the correct person to resolve your issue, then they will have to forward your message to the Technology Support Center for correct routing. This leads to an unnecessary delay.

More information, on reporting technology issues and requests, including step-by-step tutorials, can be found on the ITHelp.IllinoisState.edu knowledge article "Overview of the IT Help Portal".

University Login Identity (ULID)

Your University Logon Identity (also known as ULID) serves as your login account for almost all university related systems including email, computers, my.IllinoisState.edu (class information) and iPeople (HR information).

More information on ULIDs, including step-by-step tutorials, can be found on the ITHelp.IllinoisState.edu knowledge article "Overview of ULID Accounts".

Phone (VoIP)

Voice over IP (VoIP) is a communication technology that allows telephone calls to be placed using a broadband network instead of a regular analog phone line. VoIP is available in campus offices, classrooms, and other areas at Illinois State University.

For further information on VoIP phones, navigate to the ITHelp.IllinoisState.edu knowledge article "Overview of Voice over IP (VoIP)".

Email/Office 365 Account

CFA-IT supports accessing your university-provided Office 365 account for email, calendar, and contacts through Microsoft Outlook for Windows or Mac computers. CFA-IT does not recommend or support using any other software to access your Office 365 account for email, contacts, or calendars.

There are other various tools within the Office 365 portal that CFA-IT/ISU supports in a very limited fashion beyond installation. Tutorials for these are available from Microsoft at https://support.office.com/. The Center for Teaching, Learning, and Technology may have some small group training options for Office 365 tools. See http://ctlt.illinoisstate.edu/courses/short/ for details.

More information, including step-by-step tutorials, can be found on the ITHelp.IllinoisState.edu knowledge article "Overview of Office 365".

Phishing/Spam

While every effort is made to eliminate phishing and spam from email at Illinois State, some malicious email does get through. For spam, the email filtering system at Illinois State University detects incoming spam and delivers suspected spam to your Junk Email folder.

More information, including step-by-step tutorials on spam, can be found on the ITHelp.IllinoisState.edu knowledge article "Spam Filtering at Illinois State University".

Phishing is a bit more complicated, and largely requires end-user detection. A detailed overview of phishing and how to report it can be found on the ITHelp.IllinoisState.edu knowledge article "Overview of Phishing".

Learning Management System/LMS/ReggieNet

"ReggieNet" is an online course management system (based on Sakai) used by faculty and students at Illinois State University. Classes offered through Illinois State University may use ReggieNet to deliver course materials, assignments, quizzes, and tests to students.

ReggieNet should be the sole method for electronically delivering course materials to students enrolled in courses. ISU considers this system part of our contingency plan for delivering courses to students in the event of a natural disaster or disease outbreak and therefore no other system should attempt to deliver coursework to students as any other system will not have the same priority.

More information on ReggieNet, including step-by-step tutorials, can be found on the ITHelp.IllinoisState.edu knowledge articles "Overview of ReggieNet".

Student Access and Accommodation Services

Illinois State University provides a welcoming atmosphere for individuals with disabilities and/or medical/mental health conditions by assisting each in functioning independently within the University community and providing equal access and opportunity in accomplishing educational, professional and personal goals. As a unit of the Student Affairs Division, Student Access and Accommodation Services (SAAS) is the designated office to provide approved accommodation services for students and guests with disabilities and/or medical/mental health conditions.

As a university, we are obligated to notify all students of services available. As individuals who participate in the educational process for students, we all want each student to be successful. Placing the following accessibility statement on your syllabus will help fulfill this:
Any student needing to arrange a reasonable accommodation for a documented disability and/or medical/mental health condition should contact Student Access and Accommodation Services at 350 Fell Hall, (309) 438-5853, or visit the website at StudentAccess.IllinoisState.edu.

SAAS also has some great resources to assist faculty in creating accessible and inclusive course content on our website: StudentAccess.IllinoisState.edu. Please reach out to SAAS with any questions.

Service Interruption Notification Procedure

Non-emergency, planned maintenance, planned degraded performance, or planned outages of any CFA-IT and/or ISU service will be posted on the Alerts website. Faculty, Staff, and Students may also receive email or text message notifications of alerts when alerts are posted.
Emergency maintenance, unplanned outages, and unplanned service degradations of CFA-IT and/or ISU services that affect multiple CFA departments will be posted to the Alerts website and emails will be sent to CFA Faculty and Staff list-servers.

Planned or unplanned events of single-department services will be coordinated with their service owners and notifications may vary.

Off Campus Access to Campus Resources

It is possible to access resources such as CFA network shares from an off-campus location. To do so you must have the Cisco AnyConnect VPN application installed and configured. If your office computer is a laptop, Cisco AnyConnect VPN is included as part of the default set up.
More information on ISU's VPN, including step-by-step tutorials, can be found on the ITHelp.IllinoisState.edu knowledge articles "Overview of VPN at Illinois State University".

Copies and Printing

Each department/school has different policies regarding copies and printing. Small laser printers are provided to faculty and staff upon request through CFA-IT. Each department/school has different policies for toner replacement. Please contact your office support staff for more details.
CFA-IT highly encourages alternatives to printing such as electronic distribution through ReggieNet, SharePoint, Teams, OneDrive, network shares, email, etc.

Non-ISU Services

Registering for, requiring student use of, or simply uploading data to non-ISU contracted services, websites, web applications, etc. can violate FERPA.

University policy also prohibits members of the University from accepting a contract (or terms & conditions) on behalf of the University without prior approval from the University Lawyers. Both these reasons make registering for third party services for classroom or organizational use a violation of policies. Additionally, third party services often cannot be tested to work in our environment nor are they guaranteed to exist tomorrow.

Steps also must be taken to ensure that all students can experience a class to a reasonable extent. Third party services are not bound by this federal law so a service that a faculty member might like to use in class may not be accessible for someone with a visual impairment (for example) whereas a similar University hosted service would.

Often the needs met by a third-party service can be achieved by on-campus services. Please start with the CFA-IT Director first for recommendations on technology needs.

Equipment/Inventory

Any University-owned equipment issued for your use is the sole property of the State of Illinois. These pieces of equipment are bound to University policy about "Appropriate Use" and removal of University property must be pre-approved by your department/school's Inventory Steward. If the property is a computer or tablet, pre-approval must be arranged with CFA-IT prior to the device leaving campus.

Before purchasing any equipment, consult CFA-IT and your Inventory Steward. All equipment purchased should be delivered to your campus address. Equipment purchased with University funds must not be shipped to your home address. All equipment must go through your inventory steward immediately after purchase and then through CFA-IT before use.

Traveling with Equipment

U.S. Export Control laws and regulations are a complex body of federal regulations designed to protect U.S. interests by restricting foreign access to information, technology, commodities, or software. Simply put, "Export Controls" regulate the transfer of controlled items outside of the United States. These laws govern how controlled items can be transferred overseas to anyone, including U.S. citizens, or to foreign nationals within the United States. Export Control laws impact a variety of University activities including research, travel, shipping, procurement, communications, and hiring.

If you will be traveling overseas with any Illinois State equipment—specifically devices that contain data—you must notify CFA-IT of your travel destination(s) and the equipment you will need to take for CFA-IT to vet any restrictions.
For more information on export controls, as well as information for traveling, visit Illinois State's Export Control site.

Equipment Checkouts

CFA-IT currently has laptops available, both Macintosh and Windows, for short-term checkouts. For more information, or to initiate a checkout, use the ITHelp.IllinoisState.edu portal, or contact CFA-IT directly at 438-3224/cfahelp@ilstu.edu.

Training

Various units offer different training options. Most (but probably not all) are listed here:
- Family Educational Rights and Privacy Act (FERPA) Quick Guide (PDF)
- Center for Teaching, Learning, and Technology
- CTLT New Faculty Orientation
- Research Ethics and Compliance
- Institutional Review Board (IRB)/Human Subjects Research
- HR Orientation
- Milner Library Services
- ISU Technology Quick Start Guide (student focused)
- Overview of Technology at ISU

The Rest

Adobe Creative Cloud

Faculty, Staff, and Graduate Assistants of Illinois State University currently have access to both the Adobe Creative Cloud suite of applications and Adobe Document Cloud for free using their ISU account information (ULID and password). Students of Illinois State University can use select Adobe Creative Cloud Applications in the University computer labs and select departmental labs.

More information, including step-by-step tutorials for accessing Adobe Creative Cloud, can be found on the ITHelp.IllinoisState.edu knowledge article "Overview of Adobe Creative Cloud." In addition, Adobe's help site provides excellent tutorials for individual programs, as well as user guides. The tutorials can be used to augment class instruction, complete with downloadable sample files.

Survey Options

Illinois State has three options for creating online surveys and forms for academic research and line of business use. This website can help you decide which option is best for your need. Please use the links in the column at left to learn more about each.

Qualtrics

The Qualtrics Survey Platform is available to all Illinois State faculty, staff and students. To create or edit a survey in Qualtrics, a valid Illinois State ULID and password is required at log in. Use the Qualtrics Survey Platform in endless ways from simple forms to complex research questionnaires. With Qualtrics you can easily add from a large selection of question types like multiple choice, text entry, matrix, group, rank, drill down, file upload, and more.

More information, including step-by-step tutorials for accessing Qualtrics, can be found on the ITHelp.IllinoisState.edu knowledge article "Overview of Qualtrics Survey Platform"

Microsoft Office 365 Forms

Microsoft Forms is available to all Illinois State faculty, staff, and students through Office 365 Online. You can create surveys, quizzes, and polls, and easily see results as they come in. You can invite others to respond to it using any web browser, even on mobile devices. Built-in analytics allow you to evaluate responses in real-time, allowing you to use forms to poll live audiences during a presentation or lecture. Form data, such as quiz results, can be easily exported to Excel for additional analysis or grading. Surveys can be shared with participants beyond Illinois State. To create or edit a survey or quiz in Forms, a valid Illinois State ULID and password is required at log in.

Microsoft Forms is included in your Microsoft Office 365 subscription. More information for Forms, as well as tutorials, can be found at the Microsoft Forms help center.

Formstack

Formstack is a platform intended to assist administrative staff who want to build online forms that are embedded in Illinois State University websites. While initial training on Formstack is required before first use, the vendor provides great support articles with easy-to-follow instructions. Formstack is an easy-to-use, online tool that gives Illinois State University faculty and staff the ability to create forms for collecting data without any web design or programming background. The tool is centrally supported by WEB & Interactive Communications and is available free to the University community.

More information, including step-by-step tutorials for accessing Formstack, can be found on the ITHelp.IllinoisState.edu knowledge article "Overview of Formstack"

Data Classifications and Security

University Policy on Data Classifications

All Illinois State employees are responsible for being aware of, and following, the University's data classification policy (http://policy.illinoisstate.edu/technology/9.8.1.php). The following overview and examples are not intended to serve as a comprehensive guide to the policy. Further questions and clarification should be directed to departmental data administrators and/or the Data Stewardship Council.

Data Classifications

1. **Highly Restricted**
   a. Definition: Highly restricted data are numbers, characters, images, or other forms of output that are typically protected by federal or state law, regulation, or University policy, or the University is required to take action (breach notification or self-reporting) if the data are inappropriately accessed or disclosed. Data also are identified as 'highly restricted' when the unauthorized disclosure, alteration, or destruction of the data could cause a significant level of risk to the University or have an adverse effect on the University's operations, access, or individuals.
   b. Examples Bank (and other financial institution) account numbers, birth date year, credit/debit card numbers, directory information that if FERPA restricted by employee or student, driver's license number, marital status, passwords, and social security numbers.

2. **Restricted**
   a. Definition: Restricted data are numbers, characters, images or other forms of output that may not be accessed without specific authorization or consent because of legal, ethical or other constraints. Access to these data is limited to employees of the University and individuals who are working pursuant to the contract with the University who have a role based need to see and use the information. Any use of the data must be used to conduct University business and must follow all applicable laws, regulations and University policies and procedures.
   b. Examples Birth date (month and day), gender, photograph, race/ethnicity, UID, veteran status, and any other FERPA protected data.

3. **Unrestricted**
   a. Definition: Unrestricted data are numbers, characters, images, or other forms of output that have few internal restrictions. Some data elements classified as unrestricted still have certain dissemination restrictions and access may be denied.
   b. Examples Class/grade level, education training and level, employment dates, home address and phone, major, name, and ULID.

Data Storage and Backing Up Files

Storage

All Illinois State University faculty, staff and students have access to OneDrive for Business through the Office 365 subscription. OneDrive for Business allows you to upload and sync files to cloud-based storage and then access the files from a web browser on your computer or mobile device. In your Illinois State OneDrive account, you have one terabyte (1000 GB) of storage available. You can store up to a total of 20,000 items in your OneDrive library, including folders and files. You can upload files that are up to 2 GB in size. OneDrive has been approved by the Data Stewardship Council for unrestricted and restricted data. Highly restricted data may not be stored one OneDrive.

More information, including step-by-step tutorials for accessing Formstack, can be found on the ITHelp.IllinoisState.edu knowledge article "Overview of OneDrive for Business"

In addition to OneDrive, staff in the College of Fine Arts may have access to local networked storage for retaining and backing up departmental operational files. Staff should contact their supervisor for information on network drives pertaining to their responsibilities.

Backing Up Files

CFA-IT does not provide any data backup services, outside of College of Fine Arts operational needs. Therefore, it is important that individuals create a backup routine to reduce the chance of data loss. It is recommended that OneDrive, as well as external disk storage, be leveraged for creating file redundancy backups.

CFA Technology Spaces

Most of our spaces are closed to the instructors and classes being taught in the spaces. The exception would be CVA 140, which is considered a college-wide, general lab for instruction. CVA 138 is the college open lab and is a great resource for CFA students. Our official tech spaces are:

Center for Visual Arts (CVA) 15/16

CVA 15 and 16 comprise our audio suite. These two rooms are equipped for audio recording and editing. Although the rooms are for both for classes and general use, they are restricted access and require training on usage prior to use. No computer is located within the space. It is a laptop-only space.

Center for Visual Arts (CVA) 20

CVA 20 is our video lab. It is primarily used for video classes being taught in the School of Art. It is not a lab that is open to the public.

Center for the Visual Arts (CVA) 32

CVA 32 is a lab set up by the School of Art for creating digital artwork, sculptures, and 3D printing. It is only open to students registered for 3D design classes.

Center for the Visual Arts (CVA) 39

Our Digital Photography lab is in CVA 39. The room is equipped with large format printers and different types of paper for printing photo projects. The lab is primarily for the School of Art Photography program and is not open to the public.

Center for the Visual Arts (CVA) 45

CVA 45 is a Graphic Design facility. The lab is primarily for the School of Art Graphic Design program; however, it does have open lab times posted near the door every semester. It is also equipped with a color printer for the user of Graphic Design majors only.

Center for the Visual Arts (CVA) 138

CVA 138 is our open lab. No classes are taught in this room, and it is open for all areas of study throughout the College of Fine Arts. The room has computer workstations with most of the college's supported software installed. It is equipped with both a black-ink printer and a color printer.

Center for the Visual Arts (CVA) 140

CVA 140 is a college-wide computer lab. Unlike other school-specific rooms, this lab is used by all College of Fine Arts classes in need of a computer lab.

Centennial West (CW) 303

CW 303 is used for our School of Theatre and Dance. The lab is used for instruction in the Theatre arts. It is a closed lab where access is restricted to faculty and students taking classes taught in the room.

Currently Supported Software Catalog

All faculty/staff machines will have a default install of:
- Main web browsers
- Microsoft Office
- Adobe Creative Cloud

Other software is available upon request and will depend on licensing. Priority will be given to instructors teaching a specific software package as part of their classes. A list of most software titles that CFA-IT supports are (descriptions taken from Wikipedia):

Ableton Live

Ableton Live (http://www.ableton.com/live) is a software music sequencer and digital audio workstation for macOS and Windows. In contrast to many other software sequencers, Live is designed to be an instrument for live performances as well as a tool for composing, recording, arranging, mixing, and mastering, as shown by Ableton's companion hardware product, Ableton Push. It is also used by DJs, as it offers a suite of controls for beatmatching, crossfading, and other effects used by turntablists, and was one of the first music applications to automatically beat-match songs.

Adobe Creative Cloud

Adobe Creative Cloud (https://www.adobe.com) is a suite of applications and service from Adobe Systems. Some (not all) of the Adobe software used by the College of Fine Arts includes:

Acrobat, a family of application software and Web services developed by Adobe Inc. to view, create, manipulate, print and manage files in Portable Document Format (PDF). The family comprises Acrobat Reader (formerly Reader), Acrobat (formerly Exchange) and Acrobat.com. The basic Acrobat Reader, available for several desktop and mobile platforms, is freeware; it supports viewing, printing and annotating of PDF files. Additional, "Premium", services are available for reader on paid subscription. The commercial proprietary Acrobat, available for Microsoft Windows and macOS only, can also create, edit, convert, digitally sign, encrypt, export and publish PDF files. Acrobat.com complements the family with a variety of enterprise content management and file hosting services.

Adobe XD, a vector-based tool developed and published by Adobe Inc for designing and prototyping user experience for web and mobile apps. The software is available for macOS, Windows, iOS and Android. XD supports vector design and website wireframing, and creating simple interactive click-through prototypes

Audition (formerly Cool Edit Pro), a digital audio workstation from Adobe Systems featuring both a multitrack, non-destructive mix/edit environment and a destructive-approach waveform editing view.

After Effects, a digital visual effects, motion graphics, and compositing application developed by Adobe Systems and used in the post-production process of film making and television

production. Among other things, After Effects can be used for keying, tracking, compositing, and animation. It also functions as a very basic non-linear editor, audio editor, and media transcoder. In 2019, the program won an Academy Award for scientific and technical achievement.

Character Animator, a desktop application software product that combines live motion-capture with a multi-track recording system to control layered 2D puppets drawn in Photoshop or Illustrator. It is automatically installed with Adobe After Effects CC 2015 to 2017 and is also available as a standalone application which one can download separately. It is used to produce both live and non-live animation.

Dreamweaver, a web design and development application that uses both a visual design surface known as Live View and a code editor with standard features such as syntax highlighting, code completion, and code collapsing as well as more advanced features such as real-time syntax checking and code introspection for generating code hints to assist the user in writing code. Combined with an array of site management tools, Dreamweaver allows for its users' design, code and manage websites, as well as mobile content. Dreamweaver is an Integrated Development Environment (IDE) tool. You can live preview of changes for the frontend. Dreamweaver is positioned as a versatile web design and development tool that enables visualization of web content while coding.

Illustrator, a vector graphics editor developed and marketed by Adobe Inc. Originally designed for the Apple Macintosh, development of Adobe Illustrator began in 1985.

InDesign, a desktop publishing and typesetting software application produced by Adobe Systems. It can be used to create works such as posters, flyers, brochures, magazines, newspapers, presentations, books and ebooks. InDesign can also publish content suitable for tablet devices in conjunction with Adobe Digital Publishing Suite. Graphic designers and production artists are the principal users, creating and laying out periodical publications, posters, and print media. It also supports export to EPUB and SWF formats to create e-books and digital publications, including digital magazines, and content suitable for consumption on tablet computers. In addition, InDesign supports XML, style sheets, and other coding markup, making it suitable for exporting tagged text content for use in other digital and online formats. The Adobe InCopy word processor uses the same formatting engine as InDesign.

Lightroom, a family of image organization and image manipulation software developed by Adobe Systems for Windows, macOS, iOS, Android, and tvOS (Apple TV). It allows importing/saving, viewing, organizing, tagging, editing, and sharing large numbers of digital images. Unlike Photoshop, Lightroom's edits are always non-destructive by keeping the original image and the edits applied to it saved separately. Despite sharing its name with Adobe Photoshop, it cannot perform many Photoshop functions such as doctoring (adding, removing or altering the appearance of individual image items), rendering text or 3D objects on images, or modifying individual video frames. Lightroom is not a file manager like Adobe Bridge. It

cannot operate on files unless they are imported into its database first, and only in recognized image formats.

Photoshop, a raster graphics editor developed and published by Adobe Inc. for Windows and macOS. It was originally created in 1988 by Thomas and John Knoll. Since then, this software has become the industry standard not only in raster graphics editing, but in digital art. The software's name has thus become a generic trademark, leading to its usage as a verb (e.g. "to photoshop an image", "photoshopping", and "photoshop contest") although Adobe discourages such use. Photoshop can edit and compose raster images in multiple layers and supports masks, alpha compositing, and several color models including RGB, CMYK, CIELAB, spot color, and duotone. Photoshop uses its own PSD and PSB file formats to support these features. In addition to raster graphics, this software has limited abilities to edit or render text and vector graphics (especially through clipping path for the latter), as well as 3D graphics and video. Its feature set can be expanded by plug-ins; programs developed and distributed independently of Photoshop that run inside it and offer new or enhanced features.

Premiere Pro, a timeline-based video editing app developed by Adobe Systems and published as part of the Adobe Creative Cloud licensing program. First launched in 2003, Adobe Premiere Pro is a successor of Adobe Premiere (first launched in 1991). It is geared towards professional video editing, while its sibling, Adobe Premiere Elements, targets consumers market.

Premiere Rush, a video editing program, focused on creating and sharing online videos

Spark, a service is a part of Creative Cloud. The content automatically saves on the cloud. This free Adobe Spark web app syncs with Spark Page, Spark Post and Spark Video iOS mobile apps, allowing users to create, edit and share their visual story from any device. The three design apps allow users to create and design visual content that can be used for businesses, education, social media marketers, etc. The Spark Gallery highlights different projects made by people using the application. When using the three applications the user can import pictures or search pictures. The search engine for pictures retrieves images tagged with the Creative Commons licensed for reuse.

Audacity

Audacity (https://github.com/audacity/audacity) is a free and open-source digital audio editor and recording application software, available for Windows, macOS/OS X and Unix-like operating systems.[4][5] Audacity was started in the fall of 1999 by Dominic Mazzoni and Roger Dannenberg at Carnegie Mellon University and was released on May 28, 2000 as version 0.8.

Apple GarageBand

Apple GarageBand (http://www.apple.com/mac/garageband/) is a line of digital audio workstations for macOS and iOS devices that allows users to create music or podcasts. GarageBand is developed and sold by Apple for macOS and is part of the iLife software suite. Its music and podcast creation system enable users to create multiple tracks with pre-made MIDI keyboards, pre-made loops, an array of various instrumental effects, and voice recordings.

Apple iMovie

Apple iMovie (https://www.apple.com/mac/imovie) is a video editing software application sold by Apple Inc. for the Mac and iOS (iPhone, iPad, iPad Mini and iPod Touch). It was originally released in 1999 as a Mac OS 8 application bundled with the first FireWire-enabled consumer Mac model – the iMac DV. Since version 3, iMovie has been a macOS-only application included with the iLife suite of Mac applications. Since 2003, iMovie is included free with all new Mac computers.

Apple Numbers

Numbers (https://www.apple.com/numbers) is a spreadsheet application developed by Apple Inc. as part of the iWork productivity suite alongside Keynote and Pages. Numbers is available for iOS, and macOS High Sierra or newer. Numbers 1.0 on OS X was announced on 7 August 2007, making it the newest application in the iWork suite. The iPad version was released on 27 January 2010. The app was later updated to support iPhone and iPod Touch.

Apple Pages

Pages (https://www.apple.com/pages) is a word processor developed by Apple Inc. It is part of the iWork productivity suite and runs on the macOS and iOS operating systems. The first version of Pages was announced on January 11, 2005 and was released one month later. Pages is marketed by Apple as an easy-to-use application that allows users to quickly create documents on their devices. A number of Apple-designed templates comprising different themes (such as letters, résumés, CVs, posters, and outlines) are included with Pages.

Blender

Blender (https://git.blender.org/gitweb/gitweb.cgi/blender.git) is a free and open-source 3D computer graphics software toolset used for creating animated films, visual effects, art, 3D printed models, interactive 3D applications and video games. Blender's features include 3D modeling, UV unwrapping, texturing, raster graphics editing, rigging and skinning, fluid and smoke simulation, particle simulation, soft body simulation, sculpting, animating, match moving, rendering, motion graphics, video editing and compositing.

Lightwright

Lightwright (https://www.mckernon.com) is a proprietary software that manages theatrical lighting data and paperwork. Developed and maintained by John McKernon, the Lightwright software combines a relational database with a graphical user interface in support of user generated instrument schedules, channel hookups, and other lighting paperwork from a single spreadsheet/database. It also provides error-checking and lighting-specific data entry shortcuts. In the U.S. professional theater, Lightwright is the industry standard lighting database program. The software is widely used in the production of Broadway and other live entertainment shows, and across a number of educational and arts institutions.

Max/MSP

Max (https://cycling74.com/products/max/), also known as Max/MSP/Jitter, is a visual programming language for music and multimedia developed and maintained by San Francisco-based software company Cycling '74. Over its more than thirty-year history, it has been used by

composers, performers, software designers, researchers, and artists to create recordings, performances, and installations.

The Max program is modular, with most routines existing as shared libraries. An application programming interface (API) allows third-party development of new routines (named external objects). Thus, Max has a large user base of programmers unaffiliated with Cycling '74 who enhance the software with commercial and non-commercial extensions to the program. Because of this extensible design, which simultaneously represents both the program's structure and its graphical user interface (GUI), Max has been described as the lingua franca for developing interactive music performance software.

Microsoft Office

Excel, a spreadsheet developed by Microsoft for Windows, macOS, Android and iOS. It features calculation, graphing tools, pivot tables, and a macro programming language called Visual Basic for Applications. It has been a very widely applied spreadsheet for these platforms, especially since version 5 in 1993, and it has replaced Lotus 1-2-3 as the industry standard for spreadsheets. Excel forms part of the Microsoft Office suite of software.

Word, a word processor developed by Microsoft. It was first released on October 25, 1983[7] under the name Multi-Tool Word for Xenix systems. Subsequent versions were later written for several other platforms including IBM PCs running DOS (1983), Apple Macintosh running the Classic Mac OS (1985), AT&T Unix PC (1985), Atari ST (1988), OS/2 (1989), Microsoft Windows (1989), SCO Unix (1994), and macOS (formerly OS X; 2001).

PowerPoint, a presentation program, created by Robert Gaskins and Dennis Austin at a software company named Forethought, Inc. It was released on April 20, 1987, initially for Macintosh computers only. Microsoft acquired PowerPoint for $14 million three months after it appeared. This was Microsoft's first significant acquisition, and Microsoft set up a new business unit for PowerPoint in Silicon Valley where Forethought had been located. Microsoft PowerPoint is one of many programs run by the company Microsoft and can be identified by its trademark orange, and P initial on the logo. It offers users many ways to display information from simple presentations to complex multimedia presentations.

QLab

QLab (https://figure53.com/qlab/) is a multimedia playback cue-based software designed for theatre and live entertainment.

REAPER

REAPER (an acronym for Rapid Environment for Audio Production, Engineering, and Recording) is a digital audio workstation and MIDI sequencer software created by Cockos (https://www.reaper.fm). The current version is available for Microsoft Windows (XP and newer) and macOS (10.5 and newer). REAPER acts as a host to most industry-standard plug-in formats (such as VST and AU) and can import all commonly used media formats, including video. REAPER and its included plug-ins are available in 32-bit and 64-bit format.

Rhinoceros

Rhinoceros (https://www.rhino3d.com) is typically abbreviated Rhino, or Rhino3D and is a commercial 3D computer graphics and computer-aided design (CAD) application software

developed by Robert McNeel & Associates, an American, privately held, employee-owned company founded in 1980. Rhinoceros geometry is based on the NURBS mathematical model, which focuses on producing mathematically precise representation of curves and freeform surfaces in computer graphics (as opposed to polygon mesh-based applications). Rhinoceros is used in processes of computer-aided design (CAD), computer-aided manufacturing (CAM), rapid prototyping, 3D printing and reverse engineering in industries including architecture, industrial design (e.g. automotive design, watercraft design), product design (e.g. jewelry design) as well as for multimedia and graphic design.

SketchUp

SketchUp (https://www.sketchup.com), formerly Google Sketchup, is a 3D modeling computer program for a wide range of drawing applications such as architectural, interior design, landscape architecture, civil and mechanical engineering, film and video game design. It is available as a web-based application, SketchUp Free, a freeware version, SketchUp Make, and a paid version with additional functionality, SketchUp Pro.
SketchUp is owned by Trimble Inc., a mapping, surveying and navigation equipment company. There is an online library of free model assemblies (e.g. windows, doors, automobiles), 3D Warehouse, to which users may contribute models. The program includes drawing layout functionality, allows surface rendering in variable "styles", supports third-party "plug-in" programs hosted on a site called Extension Warehouse to provide other capabilities (e.g. near photo-realistic rendering) and enables placement of its models within Google Earth.

Unity

Unity (https://www.unity.com) is a cross-platform game engine developed by Unity Technologies, first announced and released in June 2005 at Apple Inc.'s Worldwide Developers Conference as a Mac OS X-exclusive game engine. As of 2018, the engine had been extended to support more than 25 platforms. The engine can be used to create three-dimensional, two-dimensional, virtual reality, and augmented reality games, as well as simulations and other experiences. The engine has been adopted by industries outside video gaming, such as film, automotive, architecture, engineering and construction.

VectorWorks

VectorWorks (https://www.vectorworks.net) is a versatile, on-premise application that provides extensive 2D drafting, 3D modeling, BIM and rendering capabilities for your architectural and landscape design needs.