The next meeting was on the 8th September, and thanks for coming along to support your club

As usual, our meeting will start with a 'problem solving' session where members can help others with advice and suggestions on their day to day problems. Many problems require research to present practical solutions and for this reason you should describe the problem including details of the computer, memory and operating system in an email to editor@hobartpcgroup.org.au Any solutions found will be included in the next newsletter or at the next meeting, particularly if a more visual explanation is needed.

Presidents Message.....

Well it is with some regret that I inform you all of my departure from the position of President. Whilst we sort out a new President Paul Horne will deputise in the interim. This month we welcome back Tristan Rogers (from Harvey Norman) to give us a rundown on Windows 10 and fill in any blanks left my Bill's very interesting talk ;ast month.

Hope to see you there

Membership Drive

As always we are trying to increase membership of our Group. If you introduce a new member you can have the option of having your Annual Subscription waived for the year.

JOIN THE HOBART COMPUTER USERS CLUB AND IMPROVE YOUR SKILLS

CONTENTS

Linux Bytes

Python and Raspberry Pi in education

by Ben Nuttall

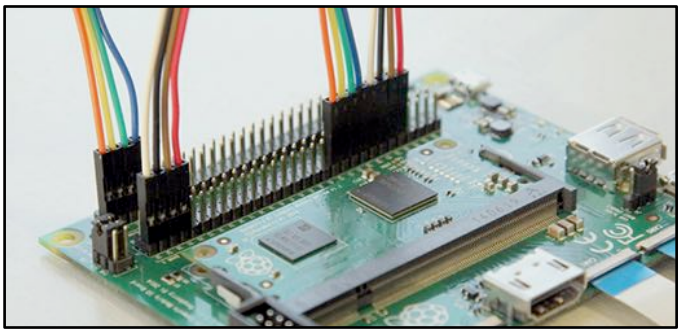
We love Python at the Raspberry Pi Foundation—it's our go-to general purpose programming language for most projects and activities. Our home-brewed, Pi-optimized Linux distribution Raspbian (a Debian variant) ships with a number of different languages and educational tools (Scratch, Ruby, Java, C, Wolfram, Mathematica, and, of course, the numerous others available in Linux), but the one we and many others tend to choose is Python.

Programming

Python's syntax is not dissimilar to pseudocode. It uses English keywords and avoids unnecessary grammar to make code easy to write and easy to read. The principles of the language's purpose and the constraint in keeping it aligned with its original aims make it a very suitable first language for any new programmer—and a great tool for educators to use to teach programming and computing concepts with simple code.

Physical computing and IoT

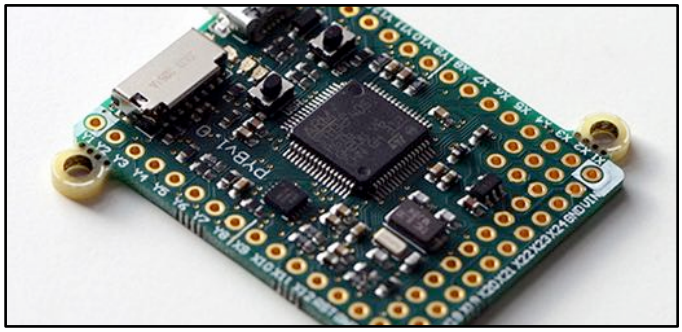
Want to drive a robot? Or control a robotic arm? Or build an embedded control panel? Or make a sous-vide machine? You can use Python for all of these! There's no need to write in C just because you're talking to hardware—Python and its collection of libraries are there to make your life easier. Physical computing is a powerful tool in education as it's so engaging and empowering for young people to be in control of things in the real world, be creative with technology, and dive into the internet of things.



Raspberry Pi Foundation. CC-BY 4.0.

Two notable Python libraries on Raspberry Pi are RPi.GPIO (for accessing the GPIO (general purpose input output) pins) and picamera (for controlling the Raspberry Pi camera module). There's also the Minecraft Pi API.

As well as on desktops, servers, and micro computers like Raspberry Pi, Python now even runs on a microcontroller called MicroPython. The European Space Agency recently announced they will be funding further development of MicroPython to determine the suitability of the language for



space-based applications.

George Robotics Limited from micropython.org. CC-BY 4.0.

Full stack

You can use Python for web programming, GUI development, scientific and numeric programming, software development, systems administration, and more. Most importantly, it's cross-platform, multi-architecture, and even runs on multiple backends. The main implementation is in C, but it also runs in the JVM, on the .Net framework, and there's a JIT (just-in-time) compiler for it written in Python (PyPy uses a restricted subset of Python called RPython) that makes it run super fast. You can't argue Python isn't useful in the real world or in industry—it's everywhere.

Python Community

Python has a great community of engineers, developers, and educators who create, teach, and share. It's a really friendly community both online and in real life. PyCon is the big international Python conference that takes place in North America each year, and there are other such events that take place all over the world.

Increasing numbers of these conferences are putting on education-focused tracks—PyConUK has done this for a number of years, where teachers are invited and given the chance to apply for a bursary for their travel and accommodation.

Teachers get the opportunity to meet with developers to ask questions and share problems they face, and can work collaboratively on furthering the possibilities they can provide their students with. PyConUK also has a day of activities for children—with workshops on Raspberry Pi and the chance to play with Python-programmed robots.

Next month EuroPython takes place in Bilbao, Spain, and for the first time there's going to be an education summit—talks and workshops by and for teachers, an education-themed sprint, and a gathering for teachers and educators to share their experiences.

Python Software Foundation

Like Raspberry Pi, the Python project is wholly owned and led by a nonprofit organization—the Python Software Foundation. The PSF has a board of elected directors, and its purpose is to promote, protect, and advance the Python programming language as well as support and facilitate the growth of the international community of Python programmers.

Python in Education (free ebook)

PyConUK organizer Nicholas Tollervey was asked to write a short book, Python in Education, which you can download for free from the O'Reilly site. The book, which was launched at PyCon in Montreal earlier this year, provides a great summary of why and how Python is used in schools, and it contains information for programmers, teachers, students, and parents.

Five Stunning Ubuntu Alternatives That You've Never Heard Of

By Christian Crawley

You're using Ubuntu, but you want your desktop experience to be a little more… eye catching. While you could always add a new desktop background, or switch desktops completely, you also have the option of switching to a completely different distro.

We've compiled this list of five utterly stunning Ubuntu alternatives for you to watch demos of, and perhaps download and install on your Linux computer.

Why Not Just Use Ubuntu?

Quite simply, there is more to Linux than Ubuntu. This may surprise you, it may not; here at MakeUseOf.com we generally focus on Ubuntu for desktop and laptops, and Raspbian (based on Debian) for the Raspberry Pi, and occasional looks at Kodi, OpenElec and other media center distros.

In reality, hundreds of Linux distros are in daily use; DistroWatch.com features a top 100 list of the current most-downloaded distros, where Mint, Debian, Ubuntu, openSUSE, and Fedora hold the top 5 spots.

Now, if you're new to Linux, Ubuntu is a very good place to start off. But if you feel like refreshing things while remaining in the Linux environment and making use of the command line tricks you have learned, then spreading your wings and trying a new distro is a good idea.

Of course, you could choose any old distro, but why not do a little bit of research and find one with a stunning GUI to impress your family and friends, and show them that Linux isn't all about command lines and Unity?

Elementary OS Freya 0.3

Employing Pantheon desktop, Elementary OS Freya 0.3 has an OS X-inspired GUI. Inspired might not be the right word, actually; if you've recently switched from OS X to Linux, then the GUI on Freya might just make you feel right at home.

Features include the lightweight Midori browser, which is HTML5 compatible, players for photos, music and video and a file explorer with three ways to find what you're looking for, grid, categories and search. Elementary OS Freya 0.3 is donationware.

Zorin OS 10 Ultimate

We often dedicated pages to Ubuntu on MUO as it has a popular position as the best OS for switchers from Windows. But is this deserved? Perhaps once upon a time it was, but these days Zoris OS can be considered far more Windows-like.

As well as stated support for Wine and PlayOnLinux, Zorin – which is based on Ubuntu – has a very useful Look Changer tool that enables you to customize the look and feel of the desktop environment. You can use this to either style something a little unique, or make the OS resemble Windows 7, XP, 2000, Ubuntu Unity,

Mac OS X, or GNOME 2.

Free and premium versions are available.

Makulu 9 XFCE

Several editions of Makulu are released, but we recommend XFCE, not least because of the features it packs it. Windows switchers in particular can forget about adding the usual office/ Steam (which runs on Linux)/Wine software as all of these are included in the install (with WPS on offer as the Microsoft Office 2003-esque office experience).

Also supported are Netflix and Popcorn Time, and Makulu 9 XFCE includes a firewall and an antivirus tool (potentially useful if you're running Windows software!). The GUI is particularly handsome, and with the Variety Wallpaper changer active you can gain complete control over the images that decorate your desktop.

Pear OS

Formerly Pear Linux, this French-programmed distro (based on Ubuntu) is no longer maintained, but you should be able to gain all of the standard day-to-day desktop use from this.

As you can see in the accompanying video, Pear OS takes design elements from iOS and OS X (from the logo all the way to the desktop) including a Mac OS X-style dock and also offers a virtual desktop switcher and everything from menu layouts and fonts to the shade of grey used resemble OS X, arguably more than with Elementary OS.

If you don't subscribe to the idea that OS X represents a visual high watermark for GUI design, then much of this may leave you cold, but if you want a Mac-like experience without the Mac-like price, then Pear OS is an option without having to resort to building a Hackintosh. Beware, however, that there will be no future updates.

Solus

Built from scratch and featuring the Budgie Desktop, Solus (previously evolve OS) is a sweet-looking OS which takes inspiration from Android's material design and adds to it.

The focus with Solus is productivity; it is an OS that "gets out of your way" to let you get on and do what you need to do without notifications and nags to change, edit and fix things. What's also interesting about Solus is that the developers seem to have a focused idea of what they're trying to achieve, and release the OS without the distraction of multiple releases for servers, mobile phones, etc. This alone makes it worth your while to take a look, with the shiny GUI a pleasant bonus.

Features

Power Tablets Compared - IPad vs Surface Pro

By Ben Redding PC User

Detachable keyboard, optional stylus, 12.9-inch screen, built for multi-tasking. Nope, it's not a Surface Pro 3.

Apple unveiled the iPad Pro on Wednesday, and the new tablet raised a lot of eyebrows—not only because Apple developed a stylus to go along with it (Steve Jobs hated them), but because the tablet very closely resembles, in form factor at least, the Microsoft Surface Pro 3.

Both ride the line between tablet and portable laptop, and Apple even claimed in its presentation that the iPad Pro is more powerful than many of the PCs that have shipped in the past two years. But that's not to say that the iPad Pro a knock-off.

The iPad Pro measures 30.4 by 22 by 0.68cm (HWD) and weighs 712 grams, which is bigger and heavier than the original iPad but still surprisingly thin, nearly matching the iPad Air 2's 0.24-inch thickness. Microsoft's Surface Pro 3 is a bit bulkier at 29.2 by 20.3 by 0.91cm inches (HWD) and 798 grams.

One new addition to the Pro: four speakers on each side, which creates more of a surround sound effect—though they're still just tablets speakers. You also get an 8-megapixel camera on the back of the iPad Pro, same as the Surface Pro 3, although the iPad's front-facing camera is only 1.2 megapixels to the Surface Pro 3's 3.5-megapixel front-facing camera, potentially making the Surface a better option for video chats.

When it comes to display, it's hard to beat Apple's new offering: a luxed-out 2,732-by-2,048 Retina display that, according to Apple, contains 5.6 million pixels. You can apparently fit two iPad Air 2 units—in portrait mode—in the iPad Pro's screen in landscape, and the larger screen is optimized for multitasking and having multiple apps on your screen at once, much like Samsung's Galaxy Tab S2 9.7. By contrast, the

Surface Pro 3's display is 2160 by 1440 on a 12-inch screen.

Internally, the iPad Pro has Apple's new A9X chip, its third-generation 64-bit chip, which is said to be 1.8x faster than the A8X found in the iPad Air 2. The Surface Pro 3 uses a real laptop chip: either an Intel Core i3, Core i5, or Core i7, making it a powerful machine for enterprise tasks and providing the full Windows experience. The iPad Pro doesn't use OS X software, but iOS. Interestingly, Microsoft made optimized Office apps for the iPad Pro that Redmond presented on stage at the event.

Microsoft's Surface Pro 3 is also a slate tablet, and the detachable keyboard cover and stylus cost extra. The stylus sells for $49, and the keyboard cover for $129. Much like the Surface Pro 3, to take full advantage of the iPad Pro's features, you'll probably need to shell out $99 for the new Apple Pencil and $169 for the Smart Keyboard Cover.

The Surface Pro 3 also comes in many configurations, from 64GB to 512GB. The iPad Pro only has 32GB and 128GB models. The price for either tablet is pretty steep: both tablets start at $799 without a keyboard cover or stylus. A Surface Pro 3 128GB is $1,029 with keyboard and stylus, and an iPad Pro 128GB is $1,348 with the Smart Keyboard cover and Apple Pencil.

The iPad Pro is slightly more expensive, but both tablets are pretty similar in price, specs, and target market. Which one is better? We'll let you know once we have the chance to test the iPad Pro.

Apple TV vs. Roku vs. Android TV: Media Streamer Shoot-Out

By Will Greenwald PC User

The newest Apple TV adds some long-awaited features to a device that hasn't been updated

since 2012, a lifetime in the world of streaming media.

While Google's first connected media platform, Google TV, didn't catch on, Android has still become a powerhouse for media hubs thanks to the Amazon Fire TV and Android TV devices. Roku was one of the first dedicated media hub brands, and it's gained in popularity thanks to an easy-to-use interface and hundreds of content channels. There's also a slew of sticks you can just plug into the back of your HDTV, as well as smart HDTVs with built-in apps. A lot has changed in three years.

Apple TV's biggest competitors are the Amazon Fire TV and Roku 3. Both are $99 and have plenty to offer, though the Fire TV is currently out of stock.

A Fire TV 2 might be on the horizon, but in the interim, the Fire TV Stick offers most of the Fire TV's useful features, with less gaming power and no microphone in the remote.

More niche users might want to also check out the pricier Nvidia Shield Android TV for its game support, while the PlayStation TV is a uniquely appealing device on its own. And for pure Android TV, Google's Nexus Player is an option.

Let's see how the new Apple TV stacks up to the Fire TV, Roku 3, PlayStation TV, Nexus Player, and Nvidia Shield Android TV.

Apps and Services

With the addition of apps to Apple TV via tvOS, all the aforementioned devices now have some sort of app ecosystem. Of them, Roku's is the most established, with Amazon Fire TV's Android-based interface coming in a close second. Both

offer hundreds of apps and services, including big names like Netflix, Hulu, YouTube, Amazon Instant Video, Sling TV, HBO, and Twitch. They also have loads of subject-specific apps for news, weather, culture, and media genres.

The Nvidia Shield Android TV and Google Nexus Player also have a strong selection through Google's Android TV platform, but they pale in comparison to Roku and Amazon. The PlayStation TV is the weakest of the bunch on this front, with few streaming services or non-game apps.

Apple TV could go either way, though we know that big services like Netflix, Hulu, HBO, and Showtime will be available at launch. The big question is how widely will tvOS be adopted as a platform for apps, and what depth and breadth of apps can we expect after a few months of development? The Apple TV isn't the iPad or iPhone, just like the Google Nexus Player and Nvidia Shield Android TV aren't Android smartphones or tablets. Their app ecosystems might be built on the same foundations, but we'll have to see just what developers build on top of them.

Remote

The Fire TV and Roku 3 both come with some very nice remotes that include built-in microphones for voice control (more on that below). The Roku 3 adds motion controls for some games and a very handy headphone jack for listening to your movies and shows without disturbing the people around you. The Fire TV, meanwhile, offers an optional gamepad controller.

The Nexus Player and Nvidia Shield Android TV also have microphone-equipped remotes, though the Shield comes with a mic-equipped gamepad and the conventional remote is optional. The PlayStation TV can be controlled with a DualShock 3 or 4 gamepad or the PlayStation 3's Bluetooth remote, but it doesn't have its own remote.

The Apple TV's new remote has everything the Fire TV, Roku 3, Shield, and Nexus Player remotes have (except for the headphone jack), and more. It has motion controls and a microphone, plus a touchpad. There's no first-party gamepad option, but that's not a big loss for a media streamer, and Apple is promoting the Nimbus Steelseries Controller on its website if you really want one.

Voice Features

Voice search is the new big feature for media streamers, and the new Apple TV introduces it to Apple users. It joins various voice search systems available on the Fire TV, Roku 3, and the Android TV devices, all of which have remotes with built-in microphones.

Of the voice-search features we've currently seen, the Android-based Android TV and Fire TV voice searches are the strongest, offering generally good media suggestions across movies and television. The Roku 3's voice search (and voice search supported on other Roku devices) can also find plenty of content, though it isn't quite as powerful as the Android devices. The PlayStation TV has no such feature.

Considering the new Apple TV's voice search is driven by Siri, it's safe to expect it to be a functional, reasonably intelligent feature. The demonstration during the new Apple TV's announcement showed off some pretty flexible voice search, playback control, and navigation options, and if they work as advertised it could be an edge for the Apple TV over other media streamers.

Games

Media streamers usually aren't big game systems, but it seems like every major streamer has tried to offer at least some video game experience. Generally, the better a media streamer a device is, the more disappointing the games.

The Amazon Fire TV and Roku 3 have some games, but the selection is fairly paltry and doesn't rise above, or even near, the collection of casual titles you can play on your smartphone.

The Nvidia Shield Android TV, on the other hand, boasts some impressive Android-powered games and can stream PC games from your desktop or notebook if you have a compatible graphics card. The PlayStation TV is almost entirely a gaming system, offering PS Vita, PSP, PSOne Classic, and PlayStation Now titles, and can stream PS4 games from your console. However, it isn't a very good media hub, because of its Vita interface and lack of a remote.

The new Apple TV promises some games like a platform-exclusive multiplayer version of Crossy Road, plus Disney Infinity and Harmonix's new

Beat Sports. TvOS offers an iOS-like platform for game development, and supports Apple's Metal framework, so bringing major iPad and iPhone games to the Apple TV is a strong possibility. Again, this depends on what developers want to do with their games, and how many will actually be ported.

Choice Awards 2015: Printers

By Eric Griffiths

The world talks a good game when it says "paperless" is the way to go, but printers are here to stay, especially in the work environment. Whether you work from home or at the corner office in the corporate tower, your desk is covered in print outs, and the printer in the corner is likely humming along all day long.

That's why, as part of our regular Readers' Choice Survey on printers every year, we make sure to ask not just about the little ink-jets used to print the kids' art projects, but how readers feel about the high-end printing systems they use. After all, we can't stress-test all the printers in PCMag Labs reviews, so it helps to get the perspective of the people in the trenches.

Want to participate in future surveys with other PCMag readers? Click here and sign up for the Readers' Choice survey email list.

The follow page reveals the results: the printer makers you should turn to when you want low costs, high reliability, and just an overall excellent experience. We'll also compare the results to what we saw last year, so you get a better idea of who is improving and what vendors are worth reconsidering. After all, even at a bargain price, an unreliable printer will get you nowhere.

Printers for Work

Last year the results were a neck-and-neck race between three favourite printer makers: Brother, Canon, and Epson. This year, things got even closer, yet in many ways easier to call.

Brother had the clear lead last year with an overall score of 8.6 (on a scale of 0 to 10, with 10 indicating perfect overall satisfaction). For 2015, it fell back, leading to a three-way tie at 8.4 between Brother, Epson, and Xerox.

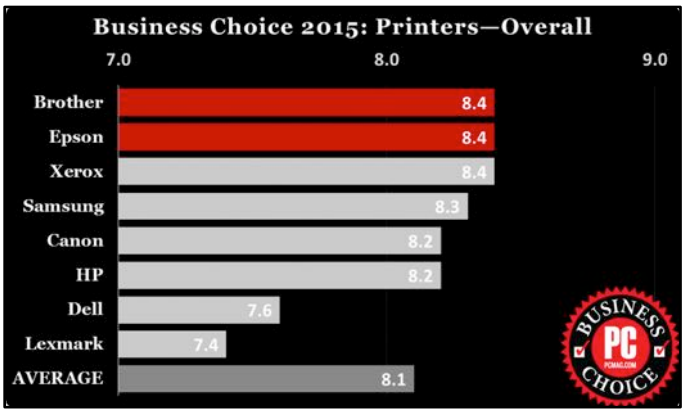
In the end, we had to give the Business Choice Award to the two winners from last year, Brother and Epson. Both of them have best-in-class-scores for reliability (8.7 for each), a low number of products that needed actual repair (Brother at 6 percent, Epson at 5 percent), and excellent likelihood to recommend numbers (8.5 and 8.4, respectively).

Xerox, while it did well in that overall satisfaction question, can't compete in any other way. Its reliability score of 8.3 is behind most of the vendors that made the cut (only Dell and Lexmark did worse). Xerox also continues to have an embarrassingly high numbers of products that require repair, at 23 percent. That's almost one in four Xerox printers getting sent back to be fixed.

The big fall this year goes to Canon. A favourite in our Readers' Choice for over a decade, this is the first year the company has dropped out of favour in the home survey and now our business-end survey. Canon's overall score of 8.2 puts it on par with HP, another huge name in the industry, but one that has never had the affinity with our audience that Canon has—or had. That said, Canon still had pretty excellent marks for reliability of 8.6, just behind Brother and Epson's 8.7. Canon's likelihood to be recommended is also just a hair lower than Epson, if you factor the Net Promoter scores, which show Epson at 51 percent and Canon at 48 percent.

When it comes to these numbers, the world of work printers is an open field. Samsung also has a fighting chance in a year or so, if it can improve reliability and cut back that 10 percent of units needing repair. It really could be a contender for the office printer market award. We'll see in 2016.

BUSINESS CHOICE WINNERS: PRINTERS



Brother

Brother's streak continues. For home or

business, it's the perennial favourite now for PCMag readers. It's strong in reliability, has a low percentage of products that need a fix, and the absolute highest score when it comes to being recommended to colleagues who need a new printer.

Epson

Epson is Brother's equal in almost every way, sharing scores for overall satisfaction and reliability, even besting Brother when it comes to the percentage of products that needed repair—just as it did last year. Epson is obviously the brand to consider when you're getting a printer for the office.

Methodology

For the 2015 Business Choice series, we emailed survey invitations to PCMag.com community members, specifically subscribers to our Readers' Choice Survey mailing list. This survey was hosted by Equation Research, which also performs our data collection. This survey was in the field from June 22, 2015 through July 12, 2015.

Respondents were asked to rate their business printer. They were asked multiple questions about their overall satisfaction as well as experiences with technical support within the past 12 months.

Because the goal of the survey is to understand how the printer compare to one another and not how one respondent's experience compares to another's, we use the average of the printer manufacturer's rating, not the average of every respondent's rating. In all cases, the overall ratings are not based on averages of other scores in the table; they are based on answers to the question, "Overall, how satisfied are you with your printer for work?"

Scores not represented as a percentage are on a scale of 0 to 10 where 10 is the best.

Net Promoter Scores are based on the concept introduced by Fred Reichheld in his 2006 best seller, The Ultimate Question, that no other question can better define the loyalty of a company's customers than "how likely is it that you would recommend this company to a friend or colleague?" This measure of brand loyalty is calculated by taking the percent of respondents who answered 9 or 10 (promoters) and subtracting the percent who answered 0 through 6 (detractors).

5 Top Apps to Help You Go Paperless

By Jill Duffy

If you have a smartphone, you need a scanning app with optical character recognition (OCR). Scanning apps help you capture all kinds of information in a split second, from whiteboard notes to important documents. A scanning app saved my behind recently after I picked up a new passport. I scanned a copy of it on the spot, but then I had to immediately turn it over to someone else to apply for a visa. Before my passport was returned to me—more than two weeks later—I had to fill out a bunch of paperwork that required details from my passport. Good thing I had a legible copy!

If you're still wondering why you would need a scanning app, and preferably one with OCR, here are a few scenarios that might convince you:

Business cards. The next time someone hands you a business card, use a scanning app to save that person's contact information in less than 30 seconds. Then celebrate being paperless by returning the business card (or recycling it later). Some apps automatically create a contact card or find the person on LinkedIn to make sure you two are fully connected.

Whiteboards and presentation slides. When you're in an important meeting, pay attention to the speaker, not every detail that's on the whiteboard or in the presentation. Just snap a picture of important slides as they appear, or scan the whiteboard as the meeting is coming to a close.

Important documents to email to others. Say your bank gives you an important document to sign, but you want your lawyer to check it over first, ASAP. You can scan the paper and email it to your lawyer right on the spot. Some scanning apps even have a tool that lets you sign them digitally, too.

Important documents to back up. Take my passport example from above and swap in any number of important documents that you can't physically keep for one reason or another, but should. In many situations, being able to scan documents—even very lengthy ones—in a matter of seconds saves you a time, money, and hassle.

Street signs. When a for-sale sign on a house catches your eye, a scanning app lets you grab a picture of the phone number, relator's name, and even the street number on the door or mailbox without having to write down anything at all. Or when you pass by a shop that's closed and see business hours written on the door, you can snap a picture and save all that text somewhere safe and searchable.

What to Look For in a Scanning App

The best scanning and OCR apps have a few key features.

Save and export options. The best scanning apps give you options for where you can save or export your newly scanned texts. You don't want an app that forces you to keep documents in a new place. Look for options such as the ability to export to Dropbox, Box, OneDrive, and other popular cloud storage services.

Search functionality. When pictures of text are turned into words, those words need to be searchable for you to get the most out of them. The best scanning apps run OCR on text in images, which helps give you strong and reliable search functionality. Just as good are scanning apps that export to a service that has great OCR and search, such as Evernote.

Edge detection. A great OCR app automatically finds the edges of paper automatically, no matter if it's A-11, legal-size paper, or a standard-size business card.

Speed. Really good OCR scanning apps fly through documents faster that you can put them in front of your smartphone's camera. They also collate multiple pages into a single PDF document with ease.

Free. Don't get suckered into paying for an expensive scanning app. Many of the best ones are free. If there is an up-sell, it's typically an enticement to pay for a premium subscription to get extra features. In a few of the very best scanning apps, the OCR functionality isn't included for free, but the cost to upgrade is nominal.

Recommended Scanning Apps

Now that you understand what scanning apps can do and why you might want one, here are a few that I recommend, with notes on their strengths and limitations.

ABBYY FineScanner

Free; $4.99 per month fee for Premium features, including OCR

ABBYY FineReader is the best OCR software for your computer, so it's no surprise that the company's mobile app, called FineScanner, is of equally high quality. The FineScanner app can export PDFs and Word docs of your scanned images to Box, Dropbox, Evernote, Facebook, Google Drive, Yandex.Disk, iTunes, and iCloud Drive for iOS users. It can send files elsewhere, too, when you look for sharing options: email, Evernote, FaxBurner, and other compatible apps and services that you have installed on your phone. One neat feature is that you can take three quick pictures of the same document and let the app decide which one is of the best quality. You'll need to pay for a Premium account ($4.99 per month) to get OCR, but other perks include support for 44 languages and the option to password-protect PDFs you create using the app. Though this app is for iOS only, the company also makes a business card reader app for Android, iOS, and Windows Phone.

Evernote, and Evernote Scannable

Free; $49.99 per year for Premium, including increased upload allowance

Evernote is my first choice in scanning and OCR apps. The namesake Evernote app lets you scan business cards, documents, and any written, typed, or hand-written text into the app, where it runs OCR on the results and makes it all searchable. The OCR is included free. Business cards scanned into Evernote are transferred into a contact card, and you can opt to connect to LinkedIn for even more details. A companion app, called Evernote Scannable (for iOS only), makes quick work of scanning stacks of business cards or multipage documents, which you can save directly into Evernote or another supported service. A Premium account for $49.99 per year increases your upload allowance, which is crucial if you create a lot of large PDFs by scanning. Great edge-detection, excellent export options, and OCR included free all make Evernote and Evernote Scannable wonderful apps to help you stay organised.

Google Drive

Free

When you upload pictures that contain text to the Google Drive mobile app, they are scanned and run through OCR to become fully searchable. Note that this functionality does not show up in the separate Google Docs and Sheets apps. The sloppy image shown here of a recipe for chocolate soda turned up when I search for "cocoa." Google didn't even get stumped by the poor lighting or awkward shadows. How great is that?

Microsoft Office Lens

Free

Microsoft this year came out with Microsoft Office Lens, its take on a mobile scanning app. Because Office Lens is from Microsoft, it works very well with OneNote, OneDrive, Word, and other Microsoft apps. It's not as zippy as Evernote Scannable, and it doesn't offer as many places where you can export files as Scanbot (see below), but it does have a Whiteboard setting, which few other scanning and OCR apps have. The Whiteboard mode cleans up photos of whiteboards by straightening and cropping appropriately, and applies a high-contrast filter to the image, making it more legible. Unfortunately, OCR isn't supported for hand-written text on whiteboards as of this writing.

Scanbot

Free; $4.99 one-time fee for Pro features, including OCR

Scanbot is another scanning and OCR app, though to get OCR, you have to upgrade to Pro by paying a $4.99 one-time fee for a lifetime membership. That's not a bad price at all, and throw in another great Pro feature—the ability to edit documents, including adding a signature—and now we're talking big benefits. Scanbot can save your scanned documents to Dropbox, Google Drive, Wunderlist, Slack, Evernote, OneDrive, Box, Yandex.Disk, WebDAV, Telekom Cloud, and Shoeboxed. On iOS, it can also sync to iCloud Drive.