

>PC_Update

December 2018

The workshop downstairs at Moorabbin is taking shape, slowly but surely.

Full story page 4

Photography: My bridge camera experience 4

A New SIG: Tech Projects 9

Free eBooks in the Library 9

How not to build a PC? 10

Photo: David Stonier-Gibson/Microcontroller SIG



>PC_Update

December 2018

The newsletter of

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Melbourne PC User Group Inc. is a member of the Association of Personal Computer User Groups

[Membership application form online](#)

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<https://www.melbpc.org.au/index.php/ihelp/ihelp-remote-support/>

Responsibility for content in this club newsletter lies with individually named authors.

Monthly Meeting Live Stream

Tune in here at 7.00pm on Wed 5th December to view the Monthly Meeting live over the Internet.
Test Transmission usually commences at around 6.30pm <http://tv.melbpc.org.au>

Editorial

Pulling together

Many, many years ago, early 70s to be precise, I had developed the vehicle loop detectors used in WA traffic lights. I was the creative, inventive force behind the design - the sole designer, actually. We won a contract to make thousands of them, in small company of maybe 8 people.



These things had to be tested. Every one had to be tested, meticulously. That was not the sort of repetitive, exacting work I could do and stay sane. We had another person, Olav, a seemingly boring, unimaginative fellow with not an ounce of creativity. But Olav tested those loop detectors, number 1000 just as meticulously as number 1, or number 100. No faults ever got past Olav.

So while I was instrumental in the technical success of the product, Olav was essential to its ongoing success.

It takes all types. So it is with our club. Our strength lies in the range of skills, personality types and interests we have in the membership. I had a great deal of respect for Olav, and even at a tender young age I recognised his difference, and his value. I respected our differences, and we became good friends. The success of our club depends on mutual respect, appreciation of each other's strengths, and tolerance of our weaknesses. Collaborating, not coercing, discussing, not arguing, listening, not telling – these are the behaviours that will let our club grow and prosper.

In this issue

Cover story: Downstairs workshop.....	3
Upstairs workspace.....	3
Photography: My bridge camera experience	4
Book review: Made by Humans - The AI condition	7
Eight Questions: S. Clause.....	7
Committee member "letter": Stephen Zuluaga	8
A New SIG: Tech Projects.....	9
Free eBooks in the Library	9
How not to build a PC?	10
The month on Yammer	13
Please identify yourself!	13
President's Report November 2018	14
A new committee with an evolving vision.....	15
SIG Reports	16
• Northern Suburbs Linux SIG - October 2018	16
December monthly meeting.....	17
Special Interest Groups – All details	18
December Calendar	25
January Calendar	26

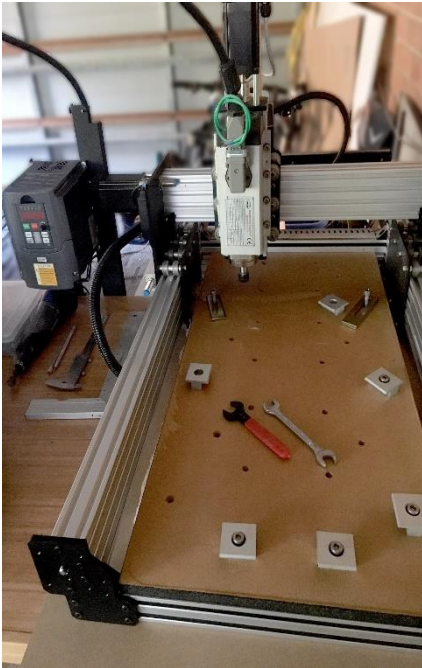
Cover story: Downstairs workshop

David Stonier-Gibson

There has been a lot of activity in the downstairs space, or “garage”, at Moorabbin in recent months. The space has great potential as a workspace for making things. A few months ago Melb PC was given some machinery, a watchmaker’s lathe and mill, by the widow of a long-term Melb PC and video SIG member, Robert Last. That equipment was not really suitable for general purpose use by members, so John Shirt, Microcontroller Workshop co-convenor, arranged to trade those for a brand-new general-purpose lathe and milling machine of types better suited to what members may want to do. Thank you, John, for taking that initiative.

The garage is a rather dark, unheated “cave” that over the years has accumulated a lot of hand-me-down printers, furniture and sundry items that have cluttered the place. It has also been used to store a lot of gear belonging to LanSlide, which used to be a computer games SIG but has since separated from Melb PC.

The first member to use the new machining facility was Rob Conroy. Rob has been making an amazing mechanised hummingbird, which he showed off at



Rob's home made CNC milling machine



the last Microcontroller SIG Wednesday night meeting. The humming bird is cut from selected laminated timber (Rob declines to call it plywood!). It is driven by a small motor, so its wings move in a realistic trajectory and its body moves to and fro to drink nectar from a flower. All the gears, cams, etc, are CNC cut from the timber (not plywood!).

There are a lot of metal shafts and bushings in Rob’s hummingbird, and he turned them all up out of brass on the Melb PC lathe in the garage.

But what is even more amazing is that in order to cut out all the wooden parts, Rob built his own Computer Numerically Controlled (CNC) three-axis timber milling machine!

Stop press: Steve Zuluaga has negotiated with the Lanslide people to remove their stuff – soon!

Upstairs workspace

David Stonier-Gibson

Meanwhile, upstairs at Moorabbin, the lounge area is being partly transformed into a clean workspace. There is a corner for doing electronic assembly such as soldering and the like, and a 3D printer. This will hopefully get gradually equipped with a collection of suitable light hand tools.

There is also a collection of electronic components

that are free to members for their projects. Contributions to the collection are welcome, BUT please do not dump unwanted rubbish parts, and please take the time, like I have, to organise them. into marked containers. Boxes full of jumbled electronic components have close to zero utility value. A work area such as this becomes attractive and desirable if it is clean, tidy, and organised. Attractive facilities will attract new members.

Photography: My bridge camera experience

David Stonier-Gibson

I am starting this article on a plane at 30,000 feet, returning from a holiday in Vietnam and Cambodia. I am fortunate to be able to travel a lot in my retirement, I am really into photography, and I need to have good equipment. But I also got sick of lugging 6 or 7 kilograms of digital SLR around the world, complete with wide angle lens, “walkabout” zoom and a “big white” telephoto zoom. I also need an excuse to share a few of my photos!

For this trip I decided to change all that, and bought a “bridge camera”, a non-DSLR camera with a wide range zoom lens. It should cover most, if not all the shooting situations I may want to handle on a trip.



So what is a bridge camera?

A bridge camera is one that bridges the gap between a point and shoot pocket camera and a fully-blown DSLR. They usually have an electronic viewfinder (EVF) as well as a rear LCD screen for framing shots. Beyond that they seem to come in two broad categories:

- Ultra-zooms, with a gigantic zoom range of 25mm to maybe 1000mm or more full-frame equivalent;
- Super-zooms, with a “mere” zoom range of 25mm to 400mm.

But to achieve an “ultra-zoom” range there’s an important design compromise, namely sensor size (see my discussions on sensor size in PC Updates April and May 2018 issues). A huge 40x or 50x zoom range cannot be achieved with a large sensor; the lens itself



Another zoom-and-grab shot. I rather like the out of focus foreground – adds spontaneity.

would become impractically large, heavy, and expensive. Even with a more modest 16x or 20x zoom range, practical considerations limit the sensor size to smaller than a full-frame (24x36mm) or APS-C (~23x15mm).

Choosing my bridge camera

For reasons of depth of focus control and image quality I am a large-sensor aficionado, so for me the choice was a no-brainer: I had to have the largest available sensor size consistent with not carrying 6kg of kit. That narrowed the field of choice to only 4 or 5 models. In

the end I bought a Panasonic FZ1000. I wanted the fancier FZ2500, but Ted’s couldn’t get it for me in time. The FZ1000 costs around \$850. It has a 25mm to 400mm equivalent zoom range, a 1" (~16x13mm) sensor and importantly for me, a fully articulated LCD screen for getting difficult camera angles like low to the ground or “periscope”. It weighs in at a bit over 1kg and is too big to be pocketable.

Ultra-zoom cameras, by comparison, typically have 1/2.3" (~6x5mm) sensors, about one quarter the area.



Shot handheld 1/25 at f8, ISO800. That’s 4 stops under-exposed, to avoid burnout in the sky.

The FZ1000 experience

Modern cameras are so feature-rich it takes ages of study to know one well. In fact, I can state with confidence I have never learned all the ins and outs of any digital camera I have owned. The FZ1000 is no excep-



Here's where the fully articulated LCD comes to the fore. I could get the camera down to his level and stay more or less standing myself.

tion. That said, I find the controls are relatively intuitive and easy to learn. During my trip I had time, and was prepared, to explore new features, and fitted them into my "work" quite readily. For example, I discovered an HDR mode (High Dynamic Range) that gives a useful result in a single shot in RAW format. That is in addition to a real HDR mode that takes 3 shots at different exposures and combines them in-camera and will only produce a jpeg.

Keeping it steady

Like all bridge cameras the LX1000 has image stabilisation (IS) to compensate for hand shake when shooting



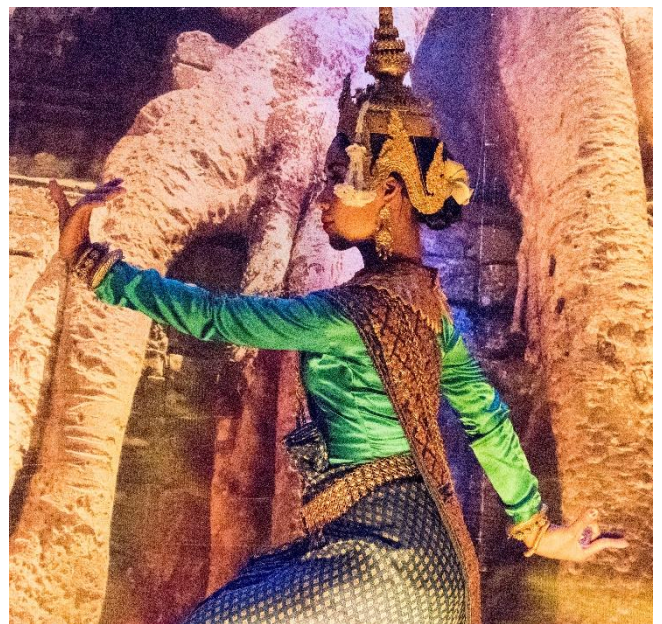
I had 2 seconds to grab this one of moving targets from a moving boat. I missed the other side of the opening ☹️

at slow shutter speeds and long tele zooms. Panasonic don't specify the amount of IS, but to me it seemed to work very well, including in video mode. For example, I experimented with perching the camera on the window ledge of our coach and recording the passing

scenery. There is practically no shake in the end result. Similarly, with any reasonable shutter speed, say 1/100S, stills taken handheld at full tele zoom (400mm) are usually shake-free.

Viewfinders

Some years ago I bought a Sony RX100IV high-end pocketable camera. One of my purchase criteria was an Electronic ViewFinder (EVF). Well, what a waste of time that turned out to be. I never use the flickery, blurry miniscule EVF on the Sony. The FZ1000 EVF is a whole different thing – it works brilliantly and can display all the shooting information. Coupled with that it is possible to change exposure settings using either full manual or priority modes, under/over exposure and manually focus with an electronic focus assist, without removing the EVF from your eye. One feature I like is



This was a preformance for our tour group in a function room in our hotel. I arrived late, cocktail in hand, and was stuck at the very back of the room, maybe 15 rows back. Time to zoom out.

a visible indicator of any over-exposed parts of the image. The camera does seem to have a tendency to "burn out" highlights if left to its own devices, so it is useful to be able to dial it down a bit. Better underexposed and then make up for it later in the computer than saturated at the bright end.

The LCD screen is fully articulated – it swings out and swivels. So a lanky old git like me can still get a low camera angle for a flower without getting down on the ground, and avoid crouching down to the level of a cute little Cambodian 4-year old, never to arise again. Echoes of my Rolleiflex/Hasselblad days!

Picture quality

I know I am not going to get the same razor-sharp images with a wide range zoom lens as I get with the expensive L-series glass in my DSLR kit. One of my DSLR

lenses costs more than the whole bridge camera. So if I were doing a shoot that I was expecting to print out poster sized, I'd use the DSLR. But my objective assessment of the sharpness is that it's pretty jolly good. Look up a review online if you really want a detailed evaluation. I had more unsharp pictures from mis-focussing than from poor lens performance as such.

As I tend to always push my luck with low light levels (IMO flash is for filling shadows in bright sunlight!) I do get noise sometimes, especially if boosting the camera to its full ISO26,600.



Deliberately underexposed by 1-2/3 stops to ensure detail in the flower.

A couple of negatives (no pun intended!)

One thing I find a bit hard to get used to is it stops down only to f8. So with maximum f2.8 at wide angle and f4 at tele, that leaves only 2 or 3 stops of aperture adjustment. The modest f8 setting is brought about by the need to avoid damaging optical diffraction effects with a very small aperture.

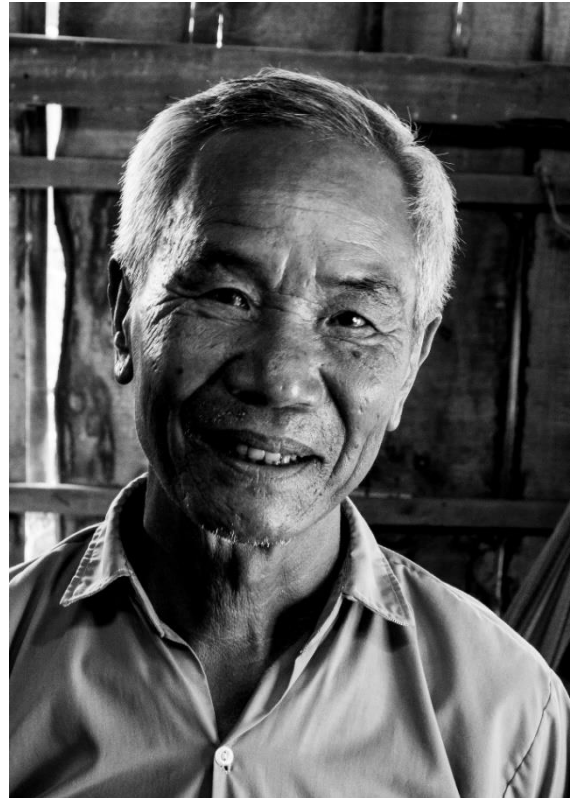


The articulated LCD let me get down to her level to grab this shot. I confess to some (slightly inept) photoshopping to make her stand out from the background.

If the exposure is way off when you actually go to press the button, the camera will beep at you. It would be nice if it gave an indication whether you were over or under exposed, so you could know quickly how to fix it. That's more likely to happen in shutter priority mode due to the limited aperture range.

Summing up

I am very happy with my bridge camera. I have owned or used everything from Rolleiflexes and Hasselblad to Speed Graphics, box cameras, folding and pinhole cameras, and of course a succession of DSLRs in later years, and this bridge camera is possibly the most versatile and easy to use of them all.



This gentleman fought with the Americans in the American war

My workflow

On holidays you want your workflow to be as quick and easy as possible. I travel with a capable laptop with Adobe Lightroom and Photoshop, plus FastStone. I always shoot in RAW. I will preview my day's shoot in FastStone, straight off the SD card, and weed out any "tossers". Then I tag those I want to post immediately to friends on social media. FastStone lets me crop and make minor level adjustments, so if that's all a shot needs I export directly from there to a jpg folder on DropBox. If it needs more processing I open it in PhotoShop's RAW import. Some shots can get enough processing there. For the very few I bring them all the way into PhotoShop. The squatting street vendor is one such shot, where I outlined the subject then wound down the colour on the background.

Book review: Made by Humans - The AI condition Ellen Broad - MUP 2018

Tim McQueen

Ellen Broad does not have a technical background. She studied law, particularly intellectual property law, then worked at the Open Data Institute in London and the Australian Digital Alliance. This led her to the study of big data, and, from there, into artificial intelligence. The book arose from a 20-minute radio talk; the expansion shows, with themes and examples repeated.

After describing her background Broad gives a brief outline of AI – what it is, and how it was developed (*How we got here*). She provides a note on language, using several pages to clarify her use of terminology: algorithm, machine learning and AI.

The first section is *Humans as data*. Broad discusses provenance and purpose, illustrating how data collected for one purpose is usually unsuitable for use in other contexts. She uses the constitutional dual-citizenship fiasco to illustrate how ‘obvious’ data may not be easily accessible. *People and prejudice* covers examples of unintentional bias in data collection and gaming systems to skew results. *Privacy and control* delves into the changing perception of privacy, what data we’re prepared to share and what we’re not, and the effect of that on conclusions drawn from big data. *Making data visible* shows how difficult it is for us to



reconsider what has been shown to be ‘true’.

Broad moves on to *Humans as designers*. She compares AI development with *alchemy*, and examines *intelligibility, fairness, openness and diversity*.

Part III *Making humans accountable* discusses *law and policy* and finally *regulating the rule makers*. Here she is quite optimistic. Despite the long-standing antagonism to any regulation of IT or the internet, Broad is optimistic about the probability of more control over the development and use of Artificial Intelligence. She uses the example of the development of the Food & Drug Administration in the United States to eliminate the scourge of patent medicines as a possible model.

Made by humans is an interesting non-technical overview of current issues in collection and use of data, particularly in automated systems.

Eight Questions: S. Clause

Graham Hurford

Each month we will ask a club member ten questions but this month I could only think of eight.. Seven will be constant - every member will be asked the same seven questions. Three more questions will be asked and these three will differ from person to person, month to month. This is not meant to be a psychological profile but just a fun way to get to know someone. Questions can be answered in any way the members wishes to. No correspondence will be entered into. This month we ask honorary member, Santa Clause.

Q: You are stranded on a deserted island. It has no electrical power. What three things would you want to have with you?

A: Two Elves and The US President. The Elves to keep me company and obey my every command. Taking The President out of his office is my gift to the World.

Q: Liability Insurance. Surely you need it just in case but how do you pay for it?

A: Ok, you got me. I visit millions and millions of homes. If I borrow some loose coin from each house, the insurance fee is covered.

Q: What is your favourite book?

A: Go the F##K to Sleep by Adam Mansbach

Q: What's the worst invention of your lifetime?

A: The Gift Card

Q: Who is your favourite music performer?

A: Bing Crosby but lately I've been listening to Michael Bublé.

Q: What has been your favourite moment on your sleigh?

A: Sorry, but what happens on the sleigh, stays on the sleigh.

Q: What do you do about toilet breaks whilst travelling on the Big Night?

A: Ok, as no one has ever asked before, I've never told anyone. Sometimes there might be some yellow rain from me or the reindeer. Sorry about that but I do try and do it over water.

Q: How do you stay so jolly?

A: The Elves and their magic hands ... I'll go no further. Plus meds, lots and lots of meds

Q: How do you navigate in the sleigh.

A: We tried going Hi-tech a few years back. Mrs C and the Elves got a few left-over coins from the Liability Insurance and bought a smart phone on a Vodaphone plan. Things worked great in the heart of the cities but once I got to the outer rims, the GPS signal was lost and I had to revert to the reading the stars. I always hope for a clear night and usually in the Southern Hemisphere, that's what I get. However, up North, the weather conditions are different. If you ever got the wrong present or no present at all, check the weather history. It might have been a cloudy night. Sorry kids but I am an old man high on meds and trying to find your chimney can sometime be almost impossible. Ho, ho, ho

Committee member "letter": Stephen Zuluaga

We are going to have each member of the new committee "introduce" themselves with a small item in PC Update. First cab off the rank is Stephen Zuluaga.

In our first committee meeting on Tuesday 20th November, we all agreed that it would be good to each write a short article to the club to let them know a bit about ourselves. I offered to go first, so I wanted to use this as a chance to share my views about the club and explore how we can work together.

I've been a member for a year and I was immediately inspired by seeing the amazing potential the club has. There are so many ways we can offer increased value to current and future members.

Being a similar age to the club itself, I recognise that this club has a significant history; in that history we have a lot of strength in the community we've developed and the capabilities we've developed for over three decades.

We have an amazing facility in our Moorabbin club rooms and workshop. We have many vibrant SIGs dotted around Greater Melbourne. I believe that we can improve the value we provide to members through our Moorabbin facilities and improve how we support our groups who meet around Greater Melbourne. I don't know what all that detail looks like, but if you have any views on what that might look like, please share your thoughts with me or anyone

else on the committee as you see fit.

The interests I have that brought me to the club initially are DIY (especially automation and energy efficiency), electronics, photography, microcontrollers and makerism, so that's what I like to spend my time at the club indulging in.

My professional skills are around business, IT, education and marketing, those are the areas I've been most involved in volunteering for the club, being on the committee now has given some formal effect to that input I've already been providing.

In my new role on the committee, I'm interested in how we can make it easy to work with anyone in the club who wants to improve something in the club for our members. I think collaboration is very important, so please, if you see me around, come and share your views on whatever you think I should know about and tell me how we can work better together.

I'm fortunate to have already built a good working relationship with several members in and outside the committee and I'm looking forward to what we can achieve together over the next 12 months and beyond.

I have previously reported on the Science Meetup, which we hosted at Moorabbin. That started out as an entity in its own right. In parallel with that we ran some “tech projects” at Moorabbin. Both those initiative were designed to attract new, young members to the club.

“Tech Projects”. is now formally a SIG, and the Science meetup is being run as one of its activities. The SIG meets every second Sunday at Moorabbin. Currently the SIG is working on a project around electromyography (EMG), the technology of detecting electrical skin signals associated with muscle activity and using those signals to control something (think prosthesis). On Sunday 25th November we had our second session on the EMG amplifier. In the first session we got a basic “front end” amplifier going, or what is technically called an instrumentation amplifier, capable of detecting the very small voltages picked up with electrodes on the skin. That has now been moved one step forward, and we are able to detect useful muscle signals. There is still a lot of work to do to refine the system, but we can see a good outcome down the road. So on Sunday some time was spent discussing what uses we can make of the ability to detect when a user flexes their muscles. Ideas ranged from controlling a light to more ambitiously controlling slot



cars (for races) or a robot arm. At the moment it looks very likely that we will eventually design and build a quantity of printed circuit EMG modules that can be applied to all kinds of applications, fun or serious. We may also seek answers to “research” questions such as how the signals vary between physically strong and weak people, or how does a muscle building regime effect the signals.

Free eBooks in the Library

Clemens Pratt

Occasionally I am advised by the Bookboon.com website that computer-related books are available as free downloads, and although they are not necessarily very recent, I have taken advantage of the opportunities, and we now have a small collection of ebooks on PC1 in the computer lounge at Moorabbin:

- Networking For Dummies (11th Edition 2016) by Doug Lowe
- Hacking for Dummies
- Learn Python in 7 Days
- MySQL Cookbook Solutions for Database Developers and Administrators, 3rd edition
- Python Programming for Teens
- IT & Programming (zip file of 60 books in .pdf format)
- Windows 8.1 - English
- Microsoft Office Powerpoint
- An-introduction-to-windows-operating-system
- Managed security service providers for dummies 2nd edition

Members visiting Moorabbin are welcome to take a copy of any of these ebooks; just bring your own memory stick.

To the above, I have just added two more:

- Object oriented programming using C#
- Digital image processing part one

As an alternative, members could register themselves with the Bookboon.com website and download any free ebooks that interest them directly.

How not to build a PC?

Dennis Parsons

I recently had the need to replace my desktop computer, well not so much replace mine but my Dad's which was starting to misbehave, and as he usually gets my hand-me-downs it meant it was time for me to upgrade! Not that I was complaining mind you, as who doesn't like owning a shiny new PC with go faster stripes (or at least new components inside their old case)?

There was however a slight logistical problem, namely that my parents live in country South Australia and very definitely aren't into building their own PCs. Rather conveniently I was travelling over the following week so I needed to get my skates on to work out what I wanted, decide where I was going to buy from and make the purchases, the aim being to replace mine and take the old parts over with me. Being an inveterate builder of my own PCs (bought my first PC pre-built in 1992 but have built the rest) I usually take time to look at my requirements, research current hardware, pick a CPU, a motherboard to match that has the features I want, then decide how much RAM the budget will reasonably stretch to. I don't routinely

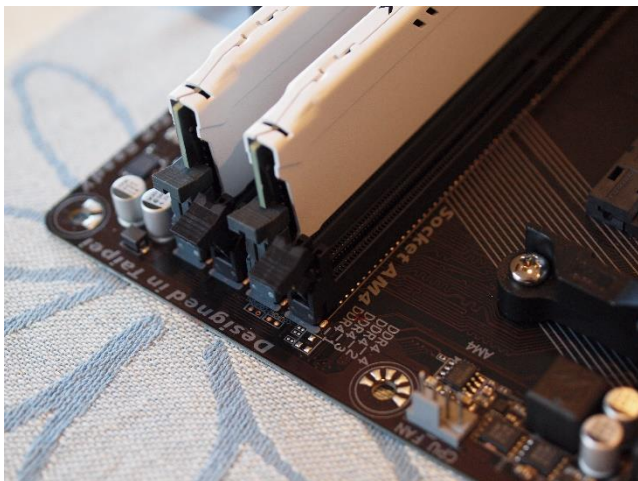


Parts motherboard, CPU (heatsink included), RAM

to a price of course! Being a long time Linux user (started with Red Hat 5.2 in 1999) I carefully check the hardware I'm acquiring to ensure compatibility and if there are any special requirements, although usually that's not a concern with motherboards and CPUs (more about that later).

Given the price and energy consumption of graphics cards, and my generally undemanding graphics requirements, these days I opt for CPUs that have integrated GPUs (Graphics Processing Units) and skip buying a separate card. Here AMD has the upper hand over Intel as the AMD integrated GPUs perform considerably better. Looking at the processor I ended up buying, purchasing a separate graphics card of similar performance would have cost around \$120.

The process I usually employ to choose components is to grab a price list from one of the larger computer stores (MSY, CPL, Centrecom, etc.), pick something near the mid-price point and examine the features offered; the initial aim being to gain an appreciation of what features to expect in current hardware (maybe requiring additional research into the details) rather than choosing what to buy. Utilise the knowledge gained and your existing requirements to create lists of features you consider "essential", "nice to have" and "not fussed". Once you have that you can look through lists of components to pick out which ones best meet your needs – you'll probably need to adjust



RAM seated in sockets

replace components such as hard or SSD drives, power supply and monitor as part of an upgrade – they get built into the new PC and replaced when they fail or I decide it's time. I generally favour AMD processors and Gigabyte motherboards but certainly don't limit my options to those.

My computing needs are fairly undemanding in general – mainly the usual suspects; browsing, e-mail, watching ABC and SBS catch-up TV, that sort of thing. I'm not into gaming or video editing but I do load the occasional virtual machine to try out various operating systems and am involved in a number of distributed computing projects via BOINC so the faster the CPU and the more cores and threads the merrier. All

your lists of features in consideration of price, although you may find your budget is unrealistic and need to adjust that instead. Maybe that feature isn't so essential after all if it's going to cost an extra \$150!

Having hopefully reduced the list to a reasonable size I try to find reviews of the particular components, not



CPU seated in socket, not locked in

just to form an idea of how good or bad they are but more importantly to try to identify any pitfalls – it's not hard to miss small but crucial compatibility issues by just looking at specs. I try to get the list down to two or three options if possible. Repeat for the rest of the components you're buying, then mix and match to put together something that hopefully meets both your needs and your budget.

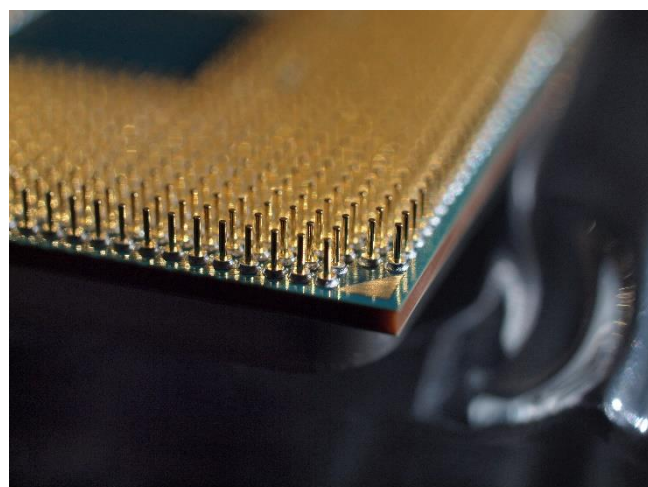
By happenstance I'd already done some preliminary research on current CPUs due to a recent discussion on Melb PC Yammer piquing my curiosity, so at least I wasn't starting out totally cold. Due to the time constraints involved I did somewhat less research than usual but was still able to come to what I think were decent choices given my particular requirements. In the end I stuck with my favoured manufacturers and went with an AMD Ryzen 5 2400G processor (4 cores, 8 threads and decent integrated graphics), a Gigabyte GA-AB350M-D3H motherboard (superseded but I wanted a motherboard with DisplayPort video output) and 16GB of DDR4 2666MHz RAM. My initial plan was for 32GB of RAM (as the current system already had 16GB) but that was very much on the "nice to have" list and was trimmed back to 16GB, saving \$220. I'll add more later on if it's really needed or if the price of RAM drops significantly.

I duly made my purchases but ran out of time to assemble them so carted my current PC and new parts to SA with me to work on over there. To my horror

once I'd assembled the new components they failed to boot. Not a single beep, no video output, nothing. The motherboard was clearly powered up as the CPU fan was running and the "ambient LED trace lighting" (line of LEDs built into the motherboard) was illuminated but that was all. After checking, re-checking and more re-checking of connectors the situation was still the same.

Having done my research prior to buying I was aware the motherboard required flashing with a recent BIOS update to work with the chosen CPU (one of those potential pitfalls I mentioned) and specifically asked about this over the phone when enquiring about availability. I was assured it would have the latest BIOS installed so went ahead with the purchase thinking I'd be good to go. A quick Google confirmed the symptoms were consistent with having a BIOS version earlier than required so I was hopeful that was the problem rather than dead hardware. Some motherboards can have the BIOS flashed without a suitable CPU present but not this one, so either way it had to wait until I returned to Melbourne to get sorted out as there were no branches of the store in Adelaide. I'm careful when handling CPUs and motherboards (avoiding static electricity and bent CPU and motherboard pins) so was reasonably confident I hadn't killed anything, but accidents can happen nonetheless.

No point in crying over spilt milk so I got on with upgrading my Dad's computer with my old components, a task that needed doing regardless of whether my new components worked or not, and there were more than enough laptops available at home that I wasn't going to be deprived of a computer to use



Close-up of CPU pins. That's a lot of pins!

when I returned. His old computer was an AMD Athlon 64 x2 5000+ with 6GB RAM, pushing 10 years old and starting to show its age with occasional lock-ups. The replacement (my old computer) was an AMD A10-5800K with 16GB RAM that's about half the age, considerably zippier and far better behaved. That upgrade went smoothly (although I did have to throw in my power supply as well due to a mismatched power connector on the old one, so it was fortunate I'd brought my entire PC with me rather than just the parts) – took the old motherboard out, put the newer one in, plugged it all back in, booted up, adjusted the video drivers and all was good. At least that worked and Dad was happy with his “new” computer, both the increased speed and more importantly no more lock-ups.

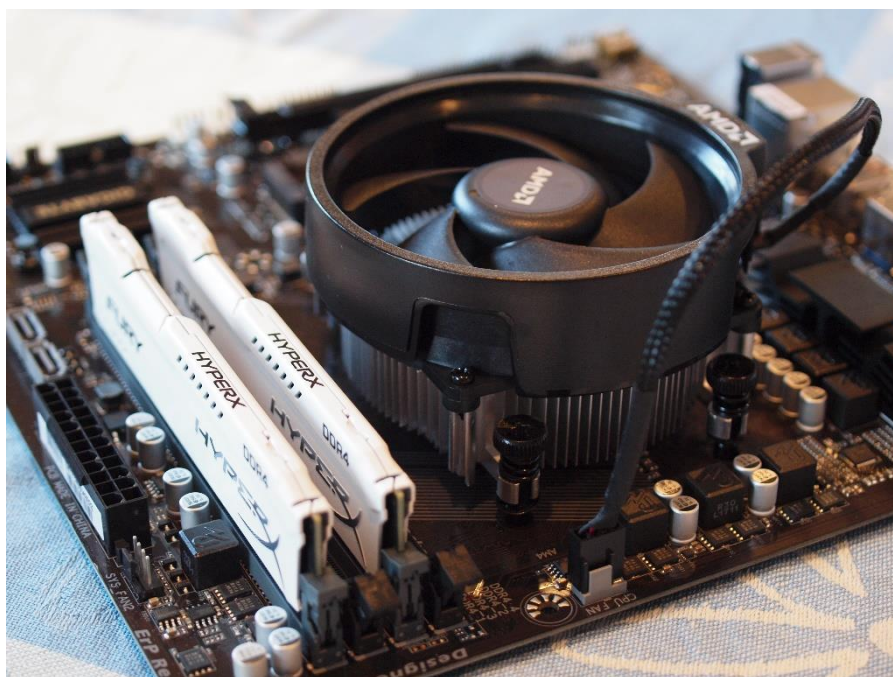
After returning to Melbourne I took the motherboard, CPU and RAM back to the shop to get things fixed, and was initially informed their standard \$50 fee for flashing the newer BIOS version would apply. Fortunately the senior tech saw it my way and agreed that given I'd purchased the motherboard, CPU and RAM from them at the same time, and that the person who served me should have known better, that it wasn't fit for purpose and there would be no charge.

Apparently if the BIOS had been updated there would have been a sticker on the box indicating this and as my motherboard box had no sticker it still had an old BIOS version, making that the likely culprit for my woes rather than hardware failure.

A couple of days later I picked up my re-flashed motherboard and bingo! It all worked. Yes, it cost me a couple of extra trips to the computer store (only one really as I had to buy a replacement power supply anyway) but at least it wasn't a dead motherboard or CPU.

Being a Linux user I'm used to routinely checking new hardware for compatibility – motherboards and CPUs generally aren't a problem, but in this case because the CPU was very new it needed the latest 4.18 kernel line installed to work properly, which posed a slight problem as I use Mageia Linux and the default kernel line is 4.14. Initially I thought I'd need to compile my own (something I hadn't done in years) so I downloaded the source files and successfully compiled a 4.18 kernel in preparation but subsequently found that the “backports” software repository carried 4.18 kernels so used a pre-compiled one instead.

In the past when upgrading a CPU and motherboard I've been able to simply plug in my existing hard drive, boot up, fiddle with the graphics drivers and it would be ready to use, just as I did with my Dad's upgrade. But not this time around. Presumably due to driver issues it was locking up during the boot process, so rather than wasting a lot of time trying to work out exactly what was going on I re-formatted the system drive, reinstalled Linux, upgraded to the 4.18 kernel, fiddled the video drivers and was up and running. Success! I was quite pleased to get there after the troubles I'd had.



Assembly complete!

In the end all's well that ends well. Sure, it cost me some extra time and effort, but I learnt a few things along the way and I'm happy with the result. Next time I'll try to avoid a motherboard that requires a BIOS update to work or if it's unavoidable be extra vigilant in confirming the BIOS has been updated (check for the sticker on the box and question the sales staff

more closely), and preferably updatable without needing a suitable CPU in place so I can do it myself if required.

Once upon a time there were newsgroups. Now we have Yammer, the online forum for Melb PC users. Within it are different groups for members with varying interests. It's also where you are likely to hear club news first. To access Yammer simply have your Melb PC login name (@melbpc.org.au email address) and password handy, click this link: <https://www.yammer.com/melbpc.org.au/> and log in

Computing

Lance was away from home and didn't have access to his usual tools so asked for suggestions for free software to merge PDFs and also convert PDFs to JPEGs. A number of suggestions were made – Libre Office Draw can be used to edit and save PDFs to other formats, PDFsam for merging (and lots more) and for the command line warrior Pdftk Server works well.

<https://www.yammer.com/melbpc.org.au/#/Threads/show?threadId=1183610604>

Chit Chat

The infamous Bunnings sausage sizzle incident sparked a lively tongue in cheek discussion and left some of us hankering for a sausage with the lot. Andrea suggested fitting crampons was the ideal solution to preventing further occurrences and Merv thought they'd be ideal for aerating his lawn (and hopefully not himself!). We still don't know if it's better to have the onions on top or underneath the sausage.

<https://www.yammer.com/melbpc.org.au/#/Threads/show?threadId=1191554497>

Security, Scams and Phishing

Peter received an e-mail detailing a hacked account and listing a previously used password. The discussion lead on to recommended practices - using complex passwords, unique to each site and utilising a password manager as you'll never remember such passwords or want to type them repeatedly. Suggested password managers included 1Password and

KeePassXC

<https://www.yammer.com/melbpc.org.au/#/Threads/show?threadId=1185008746>

NBN Questions and Comments

Roger asked for members to post any recent experiences with having NBN installed – Margaret advised that she had an actual appointment for having the much delayed HFC based service connected. She subsequently reported the connection process all went smoothly and was getting good speeds. Peter recounted a similar recent experience but was trying to work out the best way to arrange his internal phone lines. Seems the NBNCo has sorted out their problems with HFC.

<https://www.yammer.com/melbpc.org.au/#/Threads/show?threadId=1186180252>

DOTW, a weekly feature in the Chit chat group

DOTW is a light-hearted look at some of the sillier events of the week. Don't take it too seriously and do pop over to Chit Chat and vote each week.



Recent winners of the DOTW poll have been:

The ACT public servant who copied a customer's credit card details from an old email and used them to book her own flights last year and who claims to have done so inadvertently or accidentally in a (successful) attempt to avoid dismissal.

The magistrate who saw fit to merely fine a driver \$1000 for an incident in which the driver deliberately ran into a cyclist and then stopped, not to assist but to abuse him.

Craig Kelly MP for a presentation on climate change policy to the Mosman branch of the Liberal party, Kelly's PowerPoint presentation essentially denying the existence of any problem.

Bunnings for its request to community groups to stop putting onions on top of the sausage at fundraising events at its hardware stores around the country.

Please identify yourself!

By now all, or at least most, members should have a membership card with a machine-readable QR code. The committee is now embarking on a program whereby members' cards will be logged and checked at all events and meetings. There have been reports of non-members or lapsed members regularly attending meetings in contravention of policy.

So please, get in the habit of wearing your membership card. As it also is a name badge that will make it easier for people to learn and remember your name.

President's Report November 2018

A new Committee and a fresh start

John Hall, President

Last year's Committee's focus was mainly on cost cutting. At the beginning of the 2017-18 year we were budgeting for a loss of \$100,000 but the actual loss was only \$9,430 mainly due to the withdrawal from our Optus Mobile offering and the implementation of our new CiviCRM Membership System.

This year we are budgeting for a loss of around \$60,000 (see the Treasurers Financial Report at <https://www.melbpc.org.au/wp-content/uploads/2018/10/Treasurers-Report-Financial-Year-ended-30-June-2018.pdf>).

This budgeted loss is mainly due to the predicted decline in the number of Membership subscriptions plus the costs of staffing and maintaining our Moorabbin premises.

This must now be the focus of our new Committee – to increase the number of new/renewing Membership subscriptions and to make our Moorabbin premises a “Profit Centre” rather than an administrative overhead.

* We can turn our Moorabbin premises into a Profit Centre by

- a) using the facilities to attract new Members and
- b) using the premises to charge for once off events such as Workshops or Training sessions etc.

Now that we have had a full year of Membership renewals through our CiviCRM System - every Member should have a new Membership badge with a QR Code on it. These codes can be used to check in all Members arriving into Moorabbin and to scan people who may have registered for a once off event via the

“CiviEvent” module that has just been switched on for implementation this year.

The implementation of QR Code readers etc. may take some time but with the additional technical expertise that our 5 new Committee Members are bringing to the Committee it is not an impossible task.

However, the timing of these upgrades to our Moorabbin facilities is urgent – as every Month that we delay is reducing our expected revenue from these activities.

As our Balance Sheet shows – we have \$480,000 in Term deposits and Cash at Bank (see <https://www.melbpc.org.au/wp-content/uploads/2018/10/2018-09-Balance-Sheet.pdf>) so I will be recommending to the Committee that we should invest some of this in expediting the implementation of these new functions so that we can reduce the estimated \$60,000 loss by increasing our revenues from Moorabbin as soon as possible.



Office Volunteers Needed

We desperately need volunteers to assist in the office on **Mondays** and **Wednesdays** to reduce the cost of temporary staff.

Duties are “light office work” such as updating member records in the computer system, photocopying, answering the phones. The benefits are many:

* Training provided * Pleasant company * Free tea and biscuits * Deep personal satisfaction

If you can spare a day, or even half a day, please contact the Secretary, John Swale, by email

secretary@melbpc.org.au or by phone 0417 530 766.

A new committee with an evolving vision.

Our joint view of our role in the committee for 2018-2019 is that we're in this role for the club and its members.

We see this leadership role as an opportunity to be helpful servants. Helpful because we enable people to do things, not focusing on preventing them. Servant because we're serving our peers, and no one is subordinate to anyone else.

We're a hobbyist and interest-based organisation rather than being a professional body like Australian Computer Society or Engineers Australia, however we can be professional about how the club can support our members' hobbies and interests around computers and technology.

We're committed to increasing the openness and increasing utilisation of the club, its facilities and assets.

Some areas we are particularly interested in, are increasing the functionality and appeal of the lounge area near the entry, the training room and the workshop downstairs. All these areas need to be better utilised, and we would be delighted to hear how you think these spaces could better used by you and your club peers.

We want to explore how the SIGs hosted at non-Moorabbin locations can be better supported.

Stephen Zuluaga, Vice President

Imagine seeing a dynamic group of genealogy enthusiasts collaborating around a set of tables in the Borrett Room or a group of makers learning about the tricks of 3d printing in the lounge area, or perhaps a group of people keen to understand the basics of machining in the workshop downstairs.



These are examples and real activities we want to see happening more and more amongst existing and potential members.

It's been previously said that Moorabbin needs to deliver more value to all members, and there has already been a lot of work behind the scenes to pave the way for this.

Look out for changes and improvements happening to the club premises to help you get more out of them, and please feel welcome to join this ongoing discussion about how the club can engage current and potential members more effectively.

Our Statement of Purpose

The purposes of the Association are to conduct, on a non-profit basis, activities to help members learn and use systems and devices using various technologies, especially computing, software, and communications technology (including the Internet, personal computers & devices), to achieve the following outcomes:

- Advancing computer literacy;
- Advancing education and the exchange of ideas;
- Keeping members up to date on developments in computer and information technology and helping members to exchange information;
- Representing members in public debate in areas of interest including law reform proposals;
- Engaging with similar organisations; and
- Carrying out activities that benefit the Association

SIG Reports

SIGs are our Special Interest Groups. Some SIGs are based on shared interest, such as video editing, or genealogy; others are locality based, such as a Mornington Peninsula or Casey. Some SIGs chose to submit reports of their meetings to this newsletter, while others run their own websites for member information.

Unfortunately, Neil Muller is unable to provide an East SIG report this month.

• Northern Suburbs Linux SIG - October 2018

Paul Addis.

Linux News started with an item about the IBM's \$34Billion acquisition of Red Hat. It was thought to be a very high price for Red Hat's business as a cloud services integrator, with revenues of \$720 Million and some 12,000 employees. But it does make IBM the largest hybrid cloud provider.

Open source software largely runs the Internet, and the cloud services market is expanding at a high rate. Currently about 10 per cent of enterprises are committed to cloud services, and this is expected to reach 80 per cent by 2025, so presumably IBM is aiming for a good share of the expansion. In terms of current market share, Amazon is by far the largest cloud services provider, with Microsoft a distant second, and then Google, with IBM currently having a very small share of the total market.

The other item related to foldable phones. It seems that almost all phone manufacturers are working on foldable phones. Early to the market was a Chinese maker – Royole – who produce a device with a screen that folds around the outside of the phone. The phone is only available for the Chinese market or for developers in the United States.

ZTE also produces a “foldable”, although some reviewers describe it as more of a dual display or “hinged” smartphone. It's an Android 7 ("Nougat") phone with two displays, capable of running two apps side by side. The "full screen" mode gives you a 6.5-inch display with a noticeable split in the middle.

Samsung's foldable has a different style: closed it shows a conventional screen - open, it shows a double screen which is tablet-style, but with the possibility of displaying two apps on the screen in parallel. This may need extensive software modifications to support the expanded operational modes.

David Hatton started the Open Forum discussions by confirming that we had secured the use of the meeting room at Watsonia Library for our meetings in 2019. There is quite heavy use of the meeting room, and we appreciate the ability to use the facilities on a regular

basis - 2018 has been our twelfth year at Watsonia Library. David also thanked a number of members who have contributed much to the activities of the SIG.

The Open Forum continued discussion of cloud services and raised the issues of cloud backup and restore. Cloud service providers claim that their services are fully backed up and recoverable, but it was pointed out that the recovery takes place at the service level. That may not mean that an individual's data is fully protected.

The consensus was that a user should back up their data locally as well as having the cloud backup. This is particularly be the case for online email services. If the cloud service version of a user's emails is lost or corrupted, it could lead to major problems for an unlucky user who has no local backup. There was a brief discussion on the Wayback machine as a backup mechanism.

The latest version of Firefox (v 63) needs recent processor features and may not work on older machines not having the features. One member has experienced a problem with Ubuntu 18.04 producing a bug report on every boot but no-one else reported a similar problem. It was suggested that the issue might relate to the use of Intel integrated graphics.

There were comments on the lack of USB ports on new notebook machines. Some have only a single USB 3 port and only one USB 2 port. This can cause the user to resort to a hub for connecting extra devices. A member has found that one port on a USB 3 hub did not function, whereas another did. This was the case whether the hub was powered or un-powered.

As usual, the social break was enlivened with much discussion, some of it related to the issue of cloud vs local backup.

The main session of the meeting was about Qemu, an emulator and virtualisation program.

Qemu is a generic and Open Source machine Emulator and Virtualizer. Among other things, it can run programs for one supported architecture on another supported architecture, for example it can be set up to run dos programs (i386) on a Raspberry Pi (ARM).

While Qemu is best and most flexible running from the command line, a basic i386 emulator can be set up without much hassle. There are also utilities to easily create virtual disks for use with Qemu.

David used Linux Mint as the basis for the demonstration of running FreeDos in a Qemu environment.

During the setup, a list was shown of possible architectures/operating systems emulated via Qemu. It was extremely extensive, and contained some surprises, such as MIPS, SPARC and System 390. David pointed out that the emulation of FreeDos on the Raspberry Pi would operate in exactly the same way as was being demonstrated on a Linux platform.

David first used the qemu-img utility to create a virtual disk for the use of FreeDos as the C: drive. The subsequent install to the virtual disk from a downloaded FreeDos installation .iso file followed the standard install procedure. David noted that this installation can

take around 20 minutes on a Raspberry Pi as the SD cards used are significantly slower than a normal hard disk drive - it was much faster on the demonstration laptop.

It is also possible to install from simulated floppy disks, and the once-familiar process of exchanging floppy disks during installation is faithfully reproduced, in all its glory (or maybe 'gory'). Then FreeDos was run, and we were reminded of the joys of running Dos from long ago, complete with the C: prompt and all the commands that were once familiar.

This being the last meeting of the group for 2018, the evening finished with attendees getting Christmas best wishes, and the final applause showed how much the audience appreciated David Hatton's efforts.

Some links that may be of interest are

FreeDos - <http://freedos.org>

FreeDos on a Raspberry Pi -

<https://freedos-project.blogspot.com/2018/01/how-to-run-freedos-on-raspberry-pi.html>

Qemu - <https://www.qemu.org/>

... the final applause showed how much the audience appreciated David Hatton's efforts

December monthly meeting

The meeting will open at 7pm sharp, Wednesday December 5 at the Moorabbin clubrooms.

First up George Skarbek will do his computer Q&A session. Feel free to ask any technical questions you have.

Following Q&A we have our guest speaker Professor Peter Blamey, co-founder of hearing aid company Blamey Saunders, a Melbourne company that has developed an innovative hearing aid technology that is absolutely world class. It brings a fresh new approach to hearing aid design, it is manufactured in Melbourne and it has won multiple design and innovation awards. Peter will be describing the development of the Facett aid, and discuss it in the wider context of "digital health". Digital health is the way of the future. Can the hearing aid industry deliver digital health solutions, not just digital hearing aids? Peter will discuss innovations in digital hearing technology and how these are supported by a digital hearing health ecosystem.

Peter has a PhD in physics and began working on hearing when he became a member of Graeme Clark's cochlear implant research team in 1979. He is a co-author on over 200 papers on hearing, sound processing, speech and language of children with impaired hearing, and psychophysics. He is an inventor of 25 patent families.

In the break we will be trying a slightly different arrangement, with tables and chairs in a café style layout.

After the break will be a Special General meeting to make Kevin Cording an Honorary Life Member in recognition of his contributions to Melb PC.

Tim McQueen will then pick from where he left off in the March meeting, describing his many and varied experiences in the IT industry over many decades.

Finally George Skarbek will do his customary What's New segment

And don't forget, the WAFFLE SIG meeting, where you have a chance to have supper and sit and socialise for a while with fellow members in a local restaurant, kept open just for us. Details available on the night.

DECEMBER RAFFLE 2018

TICKETS: 1 = \$2, 3 = \$5



Tickets are available for purchase at the Monthly Meeting in Moorabbin.
The draw will be during the meeting and winners must be present to collect, unless an arrangement is made.

Samsung Galaxy Tab A 8.0" 16GB WiFi Android Tablet



- It features an 8" XGA LCD touchscreen display with a resolution of 1024 x 768 resolution .
- It features 2 GB of RAM which ensures that you can effectively multitask between apps.
- Camera: Rear: 5MP Auto-Focus; Front: 2MP. Video playback up to 12 hours.
- Processor: Qualcomm Snapdragon 410 APQ8016 1.2 GHz Quad-Core processor

WD Elements SE 1TB USB3.0 Portable Hard Drive



- It has a large 1 TB capacity to accommodate your files.
- This hard drive supports USB 3.0 connections, but is also backwards compatible with USB 2.0 devices.
- It has a built-in USB cable so you can connect to your computer right away.
- This hard drive comes with a 2 year warranty for your peace of mind.

Comsol 4000mAh Powerbank Black



- You can use it to charge your smartphone, tablet, camera, GPS and more.
- It has a large 4400 mAh capacity.
- It provides up to 140% extra battery life to the average smartphone
- It comes with a micro USB cable to recharge the Powerbank itself.

SanDisk 32GB USB 3.0 Flash Drive



- This flash drive has a 32 GB storage capacity.
- It has fast transfer speeds of up to 80 MB per second.
- This flash drive is compatible with USB 2.0 ports.

Special Interest Groups – All details

Data Source: Updated: 27-Nov-2018 - 21:30

Amendments: Please advise changes/corrections to: [calendar-admin@melbpc.org.au/](mailto:calendar-admin@melbpc.org.au)

Recent changes are at: <http://www.melbpc.org.au/interest-groups-resources/sig-changes/>

Access (database) and Excel

Date Jan	No Meeting
Feb-Nov	Second Mon of month (inc. Public Holidays)
Dec	Second Mon of month
Time	6:30pm - 8:30pm
Email	access@melbpc.org.au
Location	Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s)	Craig Evans craig_evans@racv.com.au

Bayside

Date Jan	Third Thu of month
Feb-Nov	Third Thu of month
Dec	Third Thu of month
Time	10am - 12noon
Email	bayside@melbpc.org.au
Location	St Stephens Church Hall, 111 North Road (cnr Cochrane St), Brighton Melway:67.F7
Convenor(s)	Peter Carpenter - 9596 3441 Brian Fergie Les Johnston

Beginners East (BEAST)

Date Jan	No Meeting
Feb-Nov	Third Sun of month
Dec	Third Sun of month
Time	10am - 12:30pm
Email	beast@melbpc.org.au
Location	Vermont South Community Centre, 1 Karobran Drive, Vermont South Melway:62.G7
Convenor(s)	Dave Botherway

Casey

Date Jan	No Meeting
Feb-Nov	Second Fri of month
Dec	Second Fri of month. (Christmas function - check location/time etc with Convenor)
Time	1pm - 3:30pm (Time to be confirmed)
Location	Beaconsfield Neighbourhood Centre, 8 O'Neil Road, Beaconsfield Melway:214.A1
Convenor(s)	Jan Whitaker - 9705 9009 jwhit@janwhitaker.com Jan Weiner - 9796 2807 weijan@westnet.com.au Phillip Rocke

Communications

Date Jan	No Meeting
Feb-Nov	Second Wed of month
Dec	Second Wed of month
Time	7 - 9:30pm
Email	phil@melbpc.org.au
Location	Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s)	Phil Lew - 0418 567 019

Digital Images

Date Jan	No Meeting
Feb-Nov	Third Fri of month
Dec	No Meeting
Time	10am - 12noon
Location	Wadham House, 52 Wadham Parade, Mount Waverley Melway:61.E12
Convenor(s)	Ian Bock - 9807 3701 bockey@melbpc.org.au George Skarbek

East

Date Jan	No Meeting
Feb-Nov	Second Thu of month
Dec	Second Thu of month (starts 6:30pm)
Time	7:30pm - 9:30pm
Email	east@melbpc.org.au
Location	Eley Park Community Centre, 87 Eley Rd, Blackburn South Melway:61.H5
Convenor(s)	Paul Woolard - 9877 1059 Ian Dewhurst - 0438 480 500

East Workshop & 3D Printing

Date Jan	No Meeting
Feb-Nov	Second Sun of month. NO meeting in May - Mother's Day.
Dec	Second Sun of month
Time	10am - 2pm
Email	eastwsh@melbpc.org.au
Location	Wadham House, 52 Wadham Parade, Mount Waverley Melway:61.E12
Convenor(s)	Paul Woolard - 0417 566 209 pwoolard@melbpc.org.au John Swale (3D printing) - 0417 530 766

Essendon - Main meeting

Date Jan	No Meeting
Feb-Nov	First Fri of month
Dec	No Meeting
Time	9:30am - 12noon
Email	essendon@melbpc.org.au
Location	Nancye Kirchner Neighbourhood Centre, Doyle Street (corner Somerset St), Avondale Heights Melway:27.D6
Convenor(s)	John Guegan - 9317 7114

Essendon - Open Forum

Date Jan	No Meeting
Feb-Nov	Second Fri of month
Dec	Second Fri of month. (Christmas Function, starts 10:30am)
Time	9:30am - 12noon
Email	essendon@melbpc.org.au
Location	Nancye Kirchner Neighbourhood Centre, Doyle Street (corner Somerset St), Avondale Heights Melway:27.D6
Convenor(s)	John Guegan - 9317 7114

Essendon - Various topics

Date Jan	No Meeting
Feb-Nov	Third Fri of month
Dec	Second Fri of month
Time	9:30am - 12noon
Email	essendon@melbpc.org.au
Location	Nancye Kirchner Neighbourhood Centre, Doyle Street (corner Somerset St), Avondale Heights Melway:27.D6
Convenor(s)	John Guegan - 9317 7114

Everything Apple

Date Jan	No Meeting
Jan-Nov	Third Tue of month
Dec	No Meeting
Time	2pm - 4pm
Email	everything-apple@melbpc.org.au
Location	Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s)	Peter Emery everything-apple@ausom.net.au Sam Fiumara

Genealogy East

Date Jan	Third Sun of month
Feb-Nov	Third Sun of month
Dec	Third Sun of month
Time	1pm - 3:30pm
Email	geneast@melbpc.org.au
Location	Vermont South Community Centre, 1 Karobran Drive, Vermont South Melway:62.G7
Convenor(s)	Denis Street

Hardware

Date Jan	No Meeting
Feb-Nov	Second Fri of month
Dec	Second Fri of month
Time	10am - 12noon
Location	Wadham House, 52 Wadham Parade, Mount Waverley Melway:61.E12
Convenor(s)	Kelvin Cording - 9438 1047 kcording@bigpond.net.au John Hall - 9803 2731 johnhall@melbpc.org.au

iHelp

Date Jan	Approximately 6 monthly
Feb-Nov	Approximately 6 monthly
Dec	Approximately 6 monthly
Time	7pm - 9pm
Email	ihelp@melbpc.org.au
Location	Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s)	Dave Simpson - 9276 4095

Investment Tools - WASINT

Date Jan	No Meeting
Feb-Nov	Second Tue of month
Dec	Second Tue of month
Time	10:30am - 12:30pm
Email	wasint@melbpc.org.au
Location	Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s)	Richard Solly

Linux Workshop - Moorabbin

Date Jan	In Recess
Feb-Nov	In Recess
Dec	In Recess
Time	
Email	linuxworkshop@melbpc.org.au
Location	Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s)	David Hatton

MACE (Atari Computers)

Date Jan	Third Sun - BBQ - check with Convener for location
Feb-Nov	Third Sun of month
Dec	Third Sun of month
Time	10am - 2pm
Email	maceatari@gmail.com
Location	Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s)	Andrew Boschan andrewbosc@gmail.com

Microcontroller

Date Jan	Second Wed of month
Feb-Nov	Second Wed of month
Dec	Second Wed of month
Time	7pm - 9:30pm
Email	microcontroller@melbpc.org.au
Location	Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s)	David Stonier-Gibson John Hollow - 0417 031 164 Phil Lew - 0418 567 019

Microcontroller Workshop

Date Jan	Second & Fourth Sat of Jan.
Feb-Nov	Second & Fourth Sat of month.
Dec	Second & Fourth Sat of month.
Time	12noon - 5pm
Email	microcontroller-workshop@melbpc.org.au
Location	Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s)	John Shirt - 0409 568 267 Rob Brown - 0419 285 806

Mornington Peninsula - General, Q&A

Date Jan	Third Mon of month
Feb-Nov	Third Mon of month
Dec	No Meeting
Time	9:30am - 12noon
Email	peninsula@melbpc.org.au
Location	Mornington Community Information and Support Centre, 320 Main St, Mornington Melway:104.E12
Convenor(s)	Terry Said - 0427 750 327 dulnain@gmail.com Ian Thomson iaroth@netspace.net.au Colin Ackehurst

Mornington Peninsula - Family History

Date Jan	Third Mon of month
Feb-Nov	Third Mon of month
Dec	No Meeting
Time	1:30pm - 4:30pm
Email	peninsula@melbpc.org.au
Location	Mornington Community Information and Support Centre, 320 Main St, Mornington Melway:104.E12
Convenor(s)	Colin Ackehurst colin_a_ackehurst@bigpond.com

Mornington Pen. Family History: Adv.DNA

Date Jan	last Wed of month (5th Wed if there is one, otherwise 4th Wed)
Feb-Nov	last Wed of month (5th Wed if there is one, otherwise 4th Wed).
Dec	No Meeting
Time	2pm - 4pm
Email	peninsula@melbpc.org.au
Location	Mornington Community Information and Support Centre, 320 Main St, Mornington Melway:104.E12
Convenor(s)	Colin Ackehurst colin_a_ackehurst@bigpond.com

Multimedia Home Entertainment

Date Jan	No Meeting
Feb-Nov	First Fri of month
Dec	First Fri of month
Time	10am - 12noon
Email	MHE@melbpc.org.au
Location	Wadham House, 52 Wadham Parade, Mount Waverley Melway:61.E12
Convenor(s)	David King Kelvin Cording - 9438 1047 kcording@bigpond.net.au

Music

Date Jan	No Meeting
Feb-Nov	Third Thu of month
Dec	No Meeting
Time	7:30pm - 9:30pm
Email	music@melbpc.org.au
Location	Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s)	Bill Sakell - 0430 566 422 John Shirt - 0409 568 267

North East Android

Date Jan	No Meeting
Feb-Nov	Third Wed of month
Dec	Second Wed of Dec - join with North East Daytime SIG - end-of-year breakup
Time	10am - 12noon
Email	ne-android@melbpc.org.au
Location	Hawdon Street Community Hall, 80 Hawdon Street, Heidelberg Melway:32.A4
Convenor(s)	Colin Lampshire 9857 5372 or 0413 640 408 lampshir@melbpc.org.au Kelvin Cording - 9438 1047

North East Daytime and Photography

Date Jan	No Meeting
Feb-Nov	Second Wed of month
Dec	Second Wed of month
Time	10am - 12noon
Email	neday@melbpc.org.au
Location	Hawdon Street Community Hall, 80 Hawdon Street, Heidelberg Melway:32.A4
Convenor(s)	Colin Lampshire 9857 5372 or 0413 640 408 lampshir@melbpc.org.au

North East Genealogy

Date Jan	No Meeting
Feb-Nov	First Wed of month
Dec	First Wed of month
Time	10am - 12noon
Email	negen@melbpc.org.au
Location	Quest Apartments, 72-84 Upper Heidelberg Road, Ivanhoe Melway:31.E8
Convenor(s)	Lynn Hammet lynnhammet@gmail.com

Northern Suburbs Linux

Date Jan	Third Mon of month
Feb-Nov	Third Mon of month
Dec	No Meeting
Time	7:30pm - 9:30pm
Email	nslig@melbpc.org.au
Location	Community Meeting Room, Watsonia Library, 4 Ibbotson St, Watsonia Melway:20.E4
Convenor(s)	David Hatton Nick Vespo

Online

Date Jan	Available online at any time
Feb-Nov	Available online at any time
Dec	Available online at any time
Time	Available online at any time
Email	kazkev@melbpc.org.au
Location	Melb PC Yammer online forum
Convenor(s)	Kevin Martin Evening only - 5964 7627 or 0407 343 162

Programming

Date Jan	Suspended, meet only on request.
Feb-Nov	Suspended, meet only on request.
Dec	Suspended, meet only on request.
Time	By arrangement
Email	programming@melbpc.org.au
Location	Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s)	John Viney

Raspberry Pi - Moorabbin

Date Jan	Second Sat of month
Feb-Nov	Second Sat of month
Dec	Second Sat of month
Time	2pm - 4pm
Email	raspi-moorabbin@melbpc.org.au
Location	Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s)	Mohan Gupta - 0421-214-081 Rob Brown - 0419 285 806

Raspberry Pi - Mt Waverley

Date Jan	No meeting Jan-2019 (room booking)
Feb-Nov	Fourth Fri of month
Dec	No Meeting
Time	10am - 12noon
Email	raspi@melbpc.org.au
Location	Wadham House, 52 Wadham Parade, Mount Waverley Melway:61.E12
Convenor(s)	John Hall - 9803 2731 johnhall@melbpc.org.au Lance Lloyd - 9884 5559 lancelloyd@melbpc.org.au

Sunbury Daytime - New Users

Date Jan	No Meeting
Feb-Nov	First Thu of month
Dec	First Thu of month
Time	9:30am - 12noon
Email	sunburydaytime@gmail.com
Location	Sunbury Senior Citizens Centre (back room), 8 O'Shanassy Street, Sunbury Melway:382.E4
Convenor(s)	Kevin Hale - 9740 5786

Sunbury Daytime - Advanced

Date Jan	No Meeting
Feb-Nov	Second Thu of month
Dec	Second Thu of month
Time	9:30am - 12noon
Email	sunburydaytime@gmail.com
Location	Sunbury Senior Citizens Centre (back room), 8 O'Shanassy Street, Sunbury Melway:382.E4
Convenor(s)	Kevin Hale - 9740 5786

Sunbury Daytime - Main Meeting

Date Jan	No Meeting
Feb-Nov	Third Thu of month
Dec	No Meeting
Time	9:30am - 12noon
Email	sunburydaytime@gmail.com
Location	Sunbury Senior Citizens Centre (back room), 8 O'Shanassy Street, Sunbury Melway:382.E4
Convenor(s)	Kevin Hale - 9740 5786

Sunbury Daytime - Maintenance & Linux

Date Jan	No Meeting
Feb-Nov	Fourth Thu and Fifth Thu of month.
Dec	No Meeting
Time	9:30am - 12noon
Email	sunburydaytime@gmail.com
Location	Sunbury Senior Citizens Centre (back room), 8 O'Shanassy Street, Sunbury Melway:382.E4
Convenor(s)	Kevin Hale - 9740 5786

Tech Projects

Date Jan	Sun-6-Jan-2019; Sun-20-Jan-2019
Feb-Nov	Approx every 2 weeks
Dec	Sun 9-Dec-2018 (the only meeting in Dec)
Time	1pm - 5pm
Email	tech-projects@melbpc.org.au
Location	Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s)	Stephen Zuluaga Dani Martin

Video Inner East

Date Jan	No Meeting
Feb-Nov	Second Mon of month. Note: move to Moorabbin for 2019
Dec	Second Mon of month
Time	7:30pm - 9:30pm
Email	rbalse@tpg.com.au
Location	Copland Room, Ashburton Library, 154 High St, Ashburton Melway:60.C9
Convenor(s)	Richard Balsillie - 9809 4116

Video Production - Pinnacle

Date Jan	No Meeting
Feb-Nov	Fourth Wed of month
Dec	No Meeting
Time	10:00am - 12:30pm
Location	Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s)	Wayne Spicer - (03) 5971 1617 spisawn@optusnet.com.au Tony Pickup - 9878 0706 tonypickup@optusnet.com.au

Video Production - Sony

Date Jan	Second Wed of month
Feb-Nov	Second Wed of month
Dec	Second Wed of month
Time	10am - 12noon
Location	Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s)	Roger Wragg rdwragg@fastmail.fm

WAFFLE - wine & fine food lovers event

Date Jan	No Meeting
Feb-Nov	First Wed of month
Dec	First Wed of month
Time	9:35pm (after the Monthly Meeting)
Email	phil@melbpc.org.au
Location	Fong's Chinese Restaurant, 725 Centre Rd (cnr Francesco St), Bentleigh East Melway:77.J1
Convenor(s)	Phil Lew - 0418 567 019 Tom Rado - 9807 4072

Website Design - Tutorials

Date Jan	No Meeting
Feb-Nov	Fourth Sun of month
Dec	No Meeting
Time	2pm - 4pm
Email	webdesign@melbpc.org.au
Location	Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s)	Fleur Stephens - 0407 330 963

Website Design - Troubleshooting

Date Jan	No Meeting
Feb-Nov	Fourth Sun of month
Dec	No Meeting
Time	4pm - 6pm
Email	webdesign@melbpc.org.au
Location	Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s)	Fleur Stephens - 0407 330 963

Windows Plus

Date Jan	No Meeting
Feb-Nov	Third Sat of month
Dec	No Meeting
Time	10am - 12noon
Email	winplus@melbpc.org.au
Location	Melb PC HQ, Level 1, 479 Warrigal Rd, Moorabbin Melway:78.D8
Convenor(s)	John Swale - 0417 530 766 Barry Stone


December Calendar

Note: 2 months' calendars in this issue!

<div>  V2-updated-27-Nov-2018 <h1>SIG & Other Meetings — Dec-2018</h1> </div>						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
Legend SIG meeting at Melb PC HQ, Moorabbin. Non-Moorabbin meeting. Cancelled Meeting Changed Meeting To be confirmed	Changes Please advise changes to: calendar-admin@melbpc.org.au	Other SIG (Special Interest Group) information: https://www.melbpc.org.au/signs/about/ Recent Changes: https://www.melbpc.org.au/signs/about/recent-changes/			Have A Question Post it on Yammer Yammer: http://yammer.com/melbpc.org.au/	1
2	3	4	5 North East Genealogy SIG Quest Apartments, Ivanhoe 10am - 12noon MONTHLY MEETING Melb PC HQ, Moorabbin 7pm – 9:30pm then Supper (WAF-FLE) at Fong's 9:35pm	6 Sunbury Daytime SIG New Users 9:30am - 12noon External Booking (Griefline) Moorabbin - All rooms 12noon – 12midnight	7 Essendon SIG Main-meeting Avondale Heights 9:30am - 12noon Multimedia Home Entertainment SIG Mount Waverley 10am - 12noon	8 Microcontroller Workshop SIG Moorabbin 12noon - 5pm Raspberry Pi – Moorabbin SIG 2pm - 4pm
9 East Workshop & 3D Printing SIG Mount Waverley 10am - 2pm MeICC – Tech Projects Outing (site visit) 1pm - 5pm	10 Access (database) and Excel SIG Moorabbin 6:30pm - 8:30pm Video Inner East SIG Ashburton 7:30pm - 9:30pm	11 Investment Tools - WASINT SIG Moorabbin 10:30am - 12:30pm	12 Video Production – Sony SIG Moorabbin 10am - 12noon North East Daytime & Photography SIG Heidelberg 10am - 12noon Communications SIG Moorabbin 7pm – 9:30pm Microcontroller SIG Moorabbin 7pm – 9:30pm	13 Sunbury Daytime SIG Advanced 9:30am - 12noon East SIG Blackburn South 6:30pm - 9:30pm	14 Essendon SIG Christmas Function Avondale Heights 10:30am – 1pm Hardware SIG Mount Waverley 10am - 12noon Casey SIG Christmas function – check time/place with convener	15 Windows Plus SIG Moorabbin 10am - 12noon
20 Sunbury Daytime SIG Main Meeting 9:30am - 12noon Bayside SIG Brighton 10am - 12noon Music SIG Moorabbin 7:30pm - 9:30pm	21 Essendon SIG Various topics. Avondale Heights 9:30am – 12noon Digital Images SIG Including Photoshops Mount Waverley 10am - 12noon Melb PC Committee Moved to 20-Dec 7pm @ Moorabbin	22 Microcontroller Workshop SIG Moorabbin 12noon - 5pm	19 North East Android SIG Heidelberg 10am - 12noon Dec: move to 12-Dec – combine with North East Daytime & Photography SIG			
27 Sunbury Daytime SIG Maintenance & Linux Fourth & fifth Thu of month 9:30am - 12noon	28 Raspberry Pi - Mt Waverley SIG 10am - 12noon Casey SIG Workshop Beaconsfield 1pm - 3:30pm	29	26 PUBLIC HOLIDAY Video Production – Pinnacle SIG Moorabbin 10:00am - 12:30pm Mornington Peninsula SIG Family History – Advanced DNA (LAST Wed of month) Mornington 2pm - 4pm.			
30	31					

January Calendar

Note: 2 months' calendars in this issue!

<div>  V2-updated-27-Nov-2018 <h2>SIG & Other Meetings — Jan-2019</h2> </div>						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
Legend SIG meeting at Melb PC HQ, Moorabbin. Non-Moorabbin meeting. Cancelled Meeting Changed Meeting To be confirmed	Changes Please advise changes to: calendar-admin@melbpc.org.au	1 PUBLIC HOLIDAY	2 North East Genealogy SIG Quest Apartments, Ivanhoe 10am - 12noon MONTHLY MEETING Melb PC HQ, Moorabbin 7pm - 9:30pm then Supper (WAF-FLE) at Fong's 9:35pm	3 Sunbury Daytime SIG New Users 9:30am - 12noon	4 Essendon SIG Main meeting Avondale Heights 9:30am - 12noon Multimedia Home Entertainment SIG Mount Waverley 10am - 12noon	5
6 MelCC - Tech Projects Moorabbin 1pm - 5pm	7	8 Investment Tools - WASINT SIG Moorabbin 10:30am - 12:30pm	9 Video Production - Sony SIG Moorabbin 10am - 12noon North East Daytime & Photography SIG Heidelberg 10am - 12noon Communications SIG Moorabbin 7pm - 9:30pm Microcontroller SIG Moorabbin 7pm - 9:30pm	10 Sunbury Daytime SIG Advanced 9:30am - 12noon East SIG Blackburn South 7:30pm - 9:30pm	11 Essendon SIG Open Forum Avondale Heights 9:30am - 12noon Hardware SIG Mount Waverley 10am - 12noon Casey SIG Main Meeting Beaconsfield 1pm - 3:30pm	12 Microcontroller Workshop SIG Moorabbin 12noon - 5pm Raspberry Pi - Moorabbin SIG 2pm - 4pm
13 East Workshop & 3D Printing SIG Mount Waverley 10am - 2pm	14 Access (database) and Excel SIG Moorabbin 6:30pm - 8:30pm Video Inner East SIG Moorabbin (formerly Ashburton) 7:30pm - 9:30pm	15 Everything Apple SIG Moorabbin 2pm - 4pm Melb PC Committee 7pm Moorabbin.	16 North East Android SIG Heidelberg 10am - 12noon	17 Sunbury Daytime SIG Main Meeting 9:30am - 12noon Bayside SIG Brighton 10am - 12noon Music SIG Moorabbin 7:30pm - 9:30pm	18 Essendon SIG Various topics: Avondale Heights 9:30am - 12noon Digital Images SIG Including Photoshop Mount Waverley 10am - 12noon	19 Windows Plus SIG Moorabbin 10am - 12noon
20 Beginners East (BEAST) SIG Vermont South 10am - 12:30pm MACE (Atari Computers) SIG BBQ - check with Convener for place/time MelCC - Tech Projects Moorabbin 1pm - 5pm Genealogy East SIG Vermont South 1pm - 3:30pm	21 Mornington Peninsula SIG General inc Q&A Mornington 9:30am - 12noon Family History Mornington 1:30pm - 4:30pm Northern Suburbs Linux SIG Watsonia 7:30pm - 9:30pm	22	23 Video Production - Pinnacle SIG Moorabbin 10:00am - 12:30pm	24 Sunbury Daytime SIG Maintenance & Linux Fourth & fifth Thu of month 9:30am - 12noon	25 Raspberry Pi - Mt Waverley SIG 10am - 12noon No room booking Casey SIG Workshop Beaconsfield 1pm - 3:30pm PC Update - Articles Deadline	26 PUBLIC HOLIDAY Microcontroller Workshop SIG Moorabbin 12noon - 5pm
27 Website Design SIG Tutorials Moorabbin 2pm - 4pm Troubleshooting Moorabbin 4pm - 6pm	28 PUBLIC HOLIDAY	29	30 Mornington Peninsula SIG Family History - Advanced DNA (LAST Wed of month) Mornington 2pm - 4pm. PC Update - Reports deadline	31 Sunbury Daytime SIG Maintenance & Linux Fourth & fifth Thu of month 9:30am - 12noon	Other SIG (Special Interest Group) information: https://www.melbpc.org.au/sigs/about/ Recent Changes: https://www.melbpc.org.au/sigs/about/recent-changes/	Have A Question Post it on Yammer Yammer: http://yammer.com/melbpc.org.au/