Wheels for the Mind

AUC

A magazine for academic staff, students and IT professionals

Summer 2012

The more things change…

When the AUC debuted over a quarter-century ago, the Mac was changing the computing world. Now, as the AUC changes, you can fit more computing power in the palm of your hand.

We look back – and forward.

AUC memories

Create-World 2012

The future of the AUC

Win an iPod Nano

Windows on your Mac

The two leading Windows virtual-machine platforms – VMware's Fusion and Parallels Desktop – have been revamped to support the new Windows 8 and the features of Apple's Mountain Lion. Whether you choose Fusion 5 or Parallels 8 comes down to personal preference, but both claim features including better speed, better integration with your Mac desktop, and the like.

Fusion 5 costs $54.95 and Parallels 8 costs $79.95 from **store.apple.com.au**.

SSD for the road

Hard-drive makers have long worked to improve the shock resistance of their mechanical products. The LaCie Rugged USB3, however, does away with the mechanics altogether and instead bundles a 120GB or 256GB bus-powered solid-state disk (SSD) into a shockproof, rubber-ringed case that will ensure the case bounces rather than cracking if you drop it. Thunderbolt and USB3 connectivity transfers data at up to 385MB per second on compatible computers.

$249 (120GB), $399 (256GB) or $299 (for a 1TB conventional hard drive) from **bit.ly/PIKTue**.

Party like it's 1983

There's no better way to show off the capabilities of your new iPad's Retina display than to load up some good, old-fashioned, 1980s arcade games with their 8-bit graphics and bleepy sound. Well, there probably is – but it wouldn't be anywhere near as fun. Plug your iPad into the Discovery Bay Atari Arcade, download the Atari's Greatest Hits app, and play any of 99 classic Atari arcade games with full joystick control.

$79.95 from Apple Store Australia. **bit.ly/P8HCCR**
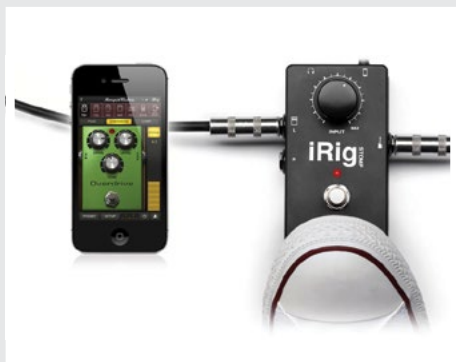
Stomp to your heart's content

More and more musicians are warming to the iPad's ability to act as a real-time sound processor. If you're one of them, the IK Multimedia iRig STOMP Guitar Interface may be just what you were looking for. A rugged metal stomp box interface that plugs into your iPad, it works with IK's AmpliTube apps, Apple's GarageBand and other music apps to control the sound from your guitar, electric violin, microphone, or sousaphone.

$79.95 from Apple Store Australia. **bit.ly/WJNLYn**

Kid-proof your iPad

Let's face it: kids love iPads, but they're not always the most coordinated creatures. And if you're terrified about the prospect of your $1000 gadget being dropped down the stairs – or if you're involved with children through your university research – you may find comfort in Studio Proper's Clumsy Case. This colourful case surrounds your iPad in a large, cushioned foam bezel that protects your iPad from drops and throws, and makes it easy for even little fingers to hold.

$39.95 from **www.studioproper.com.au**.

Adobe CS6 student pricing

If you're a student or teacher, you'll qualify for a limited-time discount from Adobe that's offering up to 76% off the price of Adobe Creative Cloud memberships – which provide access to Adobe Creative Suite 6 desktop applications, Adobe Touch Apps for mobile devices, and other benefits for $14.99 per month.

The discount is available through Adobe's Web site through 30 November at **creative.adobe.com/join/edu**.

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Editorial
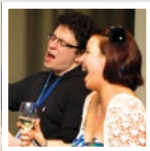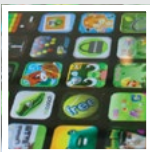
Welcome, everyone, to what may possibly be the last ever print issue of Wheels for the Mind. It's with a hint of sadness that I commit these final words for what I believe has been a fantastic publication.

I look back upon all of the remarkable achievements that the AUC, in partnership with Apple, has made happen over the last 28 odd years. This partnership was unique: no other large, technology based firm has, in my understanding, given this kind of opportunity to higher education institutions in the same way that Apple had done with the creation of the AUC.

I first became part of the AUC community back in 2000, when I was working at Monash University. In fact, I went back and searched my old email messages just to refresh my memory and found one dated September 9, 2000, where I wrote to senior members of staff about how Monash, in their first year of membership within the AUC, had successfully received 1 major and 1 seeding grant.

This was a remarkable achievement for Monash at that time, as they did not have an official Macintosh support structure in place. All of this was achieved through word of mouth and lots of dissemination of information. And this reminded me of one of the AUC's greatest strengths – its fantastic community spirit.

I remember attending my first AUDF (as it was then called) meeting and being completely blown away (and terrified!) by so many people, gathered in the same room, all working together towards the same goal: to foster the use of Apple technologies in the higher education sector. I had never come across so many high spirited, good willed, positive thinking people, who were all eager to make a real difference. It was infectious!

I remember leaving the meeting thinking to myself "what an incredible experience!". I was so energised and excited that I couldn't wait to get back and spread the word.

And here I am, 12 years later, still with a sense of enthusiasm that only the AUC can instil. I've had an amazing journey over the years. I've seen and experienced many excellent events and opportunities that only the AUC could provide and I'm truly proud to have been, and continue to be, associated with this great group of people.

In this issue, we will be reminiscing and taking a walk down memory lane. Past and current members share their stories of their involvement with the AUC and how it changed their lives.

Finally, I would like to thank all the people who I've met over the years through the AUC. Every one of them has left an impression and I am a better person for it. I look forward in the hope that the AUC can continue in a new way and I also thank Apple for their involvement: without them, we would have never existed in the first place.

David Yammouni
Editor, Wheels for the Mind

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CreateWorld registrations close 27 November

CreateWorld 2012, the latest incarnation of AUC's hugely popular creative-arts event, will be held at Griffith University's South Bank campus in Brisbane from 5 to 7 December.

There's an extensive and exciting roster of speakers and performances on offer (see page 6), and registration will be open until 27 November.

Visit **auc.edu.au/createworld/about/** for more information.

/dev/world sessions online

You may not have been one of the 110 people that attended the AUC's /dev/world conference in Melbourne in September, but that doesn't mean you have to miss out.

Recordings of many of the conference sessions – conducted by many of the AUC community's most talented Mac OS X and iOS developers – are now available online for you to download and watch.

Fourteen of the 23 sessions are available, ranging from Sebastian Beswick's presentation on computer generated audio to Judit Klein's work on programming for mobility and Peter Morton's take on TCP and Bonjour from a robotics perspective.

Click through from the event's presentation page at **auc.edu.au/devworld/sessions-2012/**.
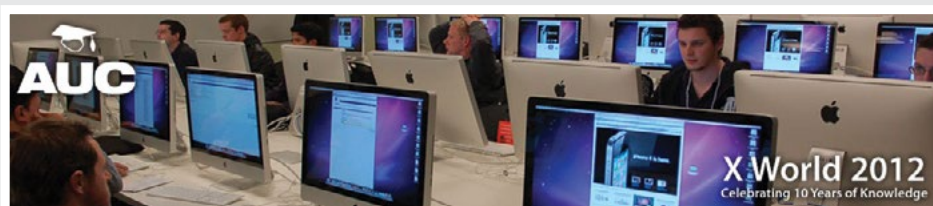
X World 2012 presentations online

The AUC's X World 2012 event welcomed over 140 university IT and technical staff from Australia, New Zealand, the USA and across the Pacific region.

For those who couldn't attend, copies of the presentations and further information are now available on the conference Web site.

Visit **auc.edu.au/xworld/sessions-2012/** to view them.

Wheels digital edition online for downloading

If you haven't seen it yet, this is just a reminder that the Wheels for the Mind digital edition – which debuted in September – is available for download from the iTunes App Store.

Designed from the ground up, the iPad digital edition includes a number of interactive videos and content to complement the normal paper edition of Wheels. This spring edition of Wheels is not available in a dead-tree version, so if you'd like to check it out, head to **bit.ly/R3KIDm** for the 391MB download.

Something interesting happening within your university's teaching environment? We want to hear about it! Drop us a line at publications@auc.edu.au.

AUC memory:
Tony Gray, AUC Chairman

Tony Gray was re-elected as Chair of AUC at the 2012 AGM, extending his two years' tenure as chair. He began involvement with the AUC as the on-campus representative for the University of Tasmania, then steadily increased his involvement as a member of the AUC Development Fund (AUCDF) committee and, eventually, chair of the AUCDF.

For me, the AUC has been a fascinating collaboration – a rewarding experience in seeing how a community of people with a common interest have been able to help each other get the maximum value out of the gear they have.

Back in the late '90s and early 2000s, Apple was very much seen as the underdog. Naturally you tend to get a lot of support from people who have an interest in participating in underdog-style communities: they feel they need to stick together. It has been particularly rewarding as new people have come into the AUC, bringing fresh ideas and wanting to be part of the same movement.

I've been very happy with what we've been able to do for students. If you go back about 12 years, students weren't really involved in the AUC. But we've been sending students to the World Wide Developers Conference in the US, and have had a lot of students come through the system now where that investment has been paid back to us in various ways.

For example, at /dev/world most sessions are run by current staff and students. Unlike almost every other AUC event, /dev/world depends on students for survival. About 60% of the talks – and the delegates – are students. I always tell them that if they're enjoying the event, the best way to support it is to come back and talk next year. And that has paid off.

One thing I have been particularly proud of has been /dev/world. We tried a lot of different events and programs in the past, but the one I was involved in most was /dev/world. For the first event we didn't know if we would have enough people interested in coming to make it viable. For the first couple of years, we were asking speakers to propose a couple of topics because we didn't know if we would get enough sessions.

In the last two years, however, we had in excess of 45 presentation offers for what amounted to 24 talking slots. It was really wonderful to see, and the event grew in popularity over the years. For me, the highlight has been its growth and the buy-in from the local community. Attendees have accepted that it's a valuable event, that they get a lot out of it, and they don't want it to stop.

Whatever happens with AUC 2.0, it has been amazing working with a lot of really talented people who share the goals of the AUC and want to continue that vision. It has been a huge reward when you see students coming through and being able to commercialise their ideas. This sort of thing has been the great success for the AUC: what it has been able to do for students in their careers.

CreateWorld 2012: into the future?

As it has in previous years, CreateWorld 2012 will be held at the South Bank campus of Griffith University in Brisbane, from 5 to 7 December.

CreateWorld is the AUC's conference for content producers, offering three days of performance, presentation, and professional development for academic and technical staff working in digital-arts disciplines.

The program is headlined by keynote presentations from four prominent artists:

Timothy Drury: a photographer, composer and 'atmospherist', Timothy has spent 20 years as a photographer and toured with artists including Don Henley, The Eagles, Whitesnake, Bryan Adams, and Stevie Nicks. He's an accomplished visual artist who combines printed images, live music and video projection on fabric screens; his debut performance was held at the Winfield Gallery in Carmel, California in October 2010, and he will be performing at CreateWorld as part of his keynote. **www.timothydrury.com**

Dr Philip D Long: As professor of Innovation and Educational Technology at the University of Queensland School of Information Technology and Electrical Engineering, Philip's research centres on exploring learning environments that have the potential to innovate teaching, learning, and creativity. A lapsed behavioural ecologist, he has studied avian mating systems around the world and now serves as founding director of UQ's Center for Educational Innovation and Technology (CEIT), which fosters scholarly collaborations between technology innovators, researchers, and students.

Jason Nelson: A digital and hypermedia poet and artist, Jason lectures on cyberstudies, digital writing and creative practice at Griffith University. His online art, which merges various genres and technologies, is focused on collages of poetry, image, sound, movement, and interaction. His best-known work includes Flash games / essays such as *Game, Game, Game And Again Game* and *I made this. You play this. We are Enemies*.

Scott Brewer: Scott's company, Art Processors Pty Ltd, designed and deployed a mobile application called The O at Hobart's Museum of Old and New Art (MONA). The world's first mobile guide designed to replace wall labels at an art gallery, The O has been used by over 500,000 visitors to MONA since, and has subsequently been turned into a white-labeled solution called the Enso Platform, which is being taken up by galleries around the world. Scott is an AUC success story, having attended Apple's World Wide Developer Conference (WWDC) in both 2007 and 2008 as a recipient of AUC student scholarships.

CreateWorld will also feature 37 different presentations from staff and students at AUC member universities around Australia and New Zealand (a full list is available at **auc.edu.au/ createworld/presentations-2012/**).

Topics range from 'What property students may learn from playing games' and 'designing iOS applications for New Zealand's national parks' to an update on the Tpack iPads in Schools Project (documented in *Wheels Spring 2012*), 'Novel data capture and presentation for indigenous archaeology', 'Virtual cooperative sculpture,' and more.

As an added bonus, *Wheels* editor David Yammouni will be presenting about the process of designing the digital Spring 2012 edition of *Wheels* (available at **bit.ly/PQ7XWx**) from the ground up – a process that presented its share of challenges and rewards.

Registration for CreateWorld 2012 closes on 27 November, with each AUC member university offered four subsidised places at the event. Subsidies include a lower registration fee as well as financial assistance towards return economy airfares and accommodation. Registration for subsidies also closes 27 November.

Although stirrings at the AUC General Meeting suggested there is enough budget to continue some events into 2013 (see page 7), this may be the last CreateWorld event – and it's set to be another corker!

For more information, visit **auc.edu.au/createworld**.

AUC AGM 2012: Towards AUC 2.0

By David Yammouni

> As we move into 2013, we will still have enough funds to run several more programs; this will be detailed further at the General Meeting in February next year."

As you may have gathered, 2012 has proven to be a difficult year for the AUC. In May, at the Executing Committee meeting, Apple announced that they would cease funding the AUC as of September 28, 2012. This announcement was unexpected and, as a result, caused the Executive Committee to have to completely re-think future plans for the AUC.

The biggest challenge that the Executive faced was that any decisions about the AUC's future would have to be agreed upon at the next Annual General Meeting which, surprisingly enough, was also scheduled for September 28. This required the Executive to put forward proposals to the membership about what possible paths the AUC could follow.

An options paper was developed and this was circulated amongst the members for discussion, initially at an online teleconference prior to the AGM and then, ultimately, at the AGM. This was the main discussion topic for this year's AGM and the overwhelming sentiment from the members was that we do everything possible to try and continue to run a new, re-imagined AUC (affectionately known as AUC 2.0).

As to how this will be done, we are still not 100% certain but the Executive, in conjunction with the Financial Planning Officer, will put forward a proposed budget for discussion and approval at the next AUC General Meeting, which is planned for February 2013.

Also on the agenda was the election of committee members. Due to the future of the AUC and the loss of funding, it was agreed that there would no longer be need of an AUCDF Chair or AUCDF Committee. The day prior to the AGM, the regular AUCDF meeting was held and it was noted that Daniel Saffioti and the AUCDF Committee be thanked for all their efforts. This sentiment was echoed again at the AGM.

So, the AUC committee moving forward into 2013 will be Tony Gray (University of Tasmania) as the Chair; Stephen Young (University of Melbourne) as the Financial Planning Officer; David Yammouni (Swinburne University of Technology) as the Publications Officer; Michael Docherty (Queensland University of Technology) as Committee Member; Donna Ashelford (University of Queensland) as Committee Member and the new addition to the team; Nick Falkner (University of Adelaide) as a Committee Member. We are also fortunate to continue to have Andrew Jeffrey on board as the Executive Officer.

The outgoing member of the Executive, James Harper from the University of Auckland, was thanked for his input and support during his time on the committee.

Financially speaking, the overall rebate for the year was significantly down on previous years but we realised some savings due to several programs not being run in light of the funding announcement in May. As we move into 2013, we will still have enough funds to run several more programs; this will be detailed further at the General Meeting in February next year.

We look forward to the future with a sense of hope and with the possibility of a new AUC 2.0. Who knows what opportunities may arise? But we all agree that we would like the AUC to continue for many years to come.

/dev/world 2012

Bigger and better than ever

The AUC's /dev/world Mac OS X and iOS development conference has grown to become a major event on the AUC's calendar, with well over 100 attendees converging on the Rydges Bell City Melbourne from 24 to 26 September.

As in the past, the event was jam-packed with content, with sessions ranging from Paul Beaumont's guide to building a 'wrapper' application in iOS and HTML5, to Robert Gardam's guide to Apple push notifications, to Jon Manning's presentation on 'tweakability' and Chris Neugebauer's discussion of 'sensible' Web API design.

"It was really wonderful to see," says Tony Gray, Technical Services Manager for the University of Tasmania's School of Computing & Information Systems, who has been instrumental in the organisation of /dev/world since its inception.

"The event grew in popularity over the years," Gray adds. "For me, the highlight has been its growth and the buy-in from the local community. Attendees have accepted that it's a valuable event, that they get a lot out of it, and they don't want it to stop."

Featured presenters included James Cuda, founder of iOS development house Savage Interactive, which focuses on building mobile software for professional artists. His Procreate for iPad app reached #1 on the iTunes App Store in numerous countries – even displacing Angry Birds.

Also presenting at /dev/world was Scott Brewer, co-founder and CTO of Melourne-based company Art Processors. Brewer's team built The O mobile application, which has been used in an innovative project to replace wall labels at Hobart's Museum of Old and New Art (MONA).

The strong sentiment from attendees around /dev/world may see it continued in 2013, assuming the AUC executive – of which Gray is chair – is able to develop a financially workable model for holding the event.

"That's a bit of a challenge for us as the AUC reinvents itself," Gray says. "We're considering how we can cater for that in whatever new model we come up with. It's certainly our intention to focus on continuing to run events that have been successful in the past."

"The challenge will be how we can do that in a way that can work from a cost and budget perspective, and whether we can still produce compelling events that attendees will come to knowing they have to pay full fare."

Many of the /dev/world 2012 sessions are now available online (**auc.edu.au/ devworld/sessions-2012/**) for those that want to relive their favourites, or those who couldn't make the event and want to know what it's all about.

Apple Updates

It's been a busy time for Apple, which not only delivered the world's most eagerly-awaited smartphone but found time to add a new product to its range, and make significant improvements to existing ones. Here are the highlights:

It's iPad, but mini

The Internet rumour mill was in top gear as Apple finally confirmed what pundits had been saying for months: that it would release a smaller iPad to take on rival offerings like Amazon's Kindle Fire and Samsung's Galaxy Tab.

The new iPad mini upped the ante in that market space, with a 7.9-inch display, front and back FaceTime cameras, and an A5 processor. The iPad got all the press for its fits-in-your-hand, light weight, design. It does not have a Retina screen, but packs the same number of pixels – 1024 x 768 – as the original iPad and iPad 2.

The iPad also got a feature bump with the introduction of a new, fourth-generation model featuring a new A6X CPU that's twice as fast as the A5X CPU in the model released earlier this year.

The iPad mini ranges from $369 for a 16GB WiFi version, to $729 for a 64GB WiFi+cellular version.

www.apple.com.au/ipad-mini

The widescreen iPhone

Pent-up demand meant Apple's iPhone 5 was always going to be a runaway success, but when the phone sold 5 million units in its first weekend even CEO Tim Cook said demand had been "incredible".

Little wonder: the iPhone 5 represents the most significant change to the iPhone in years.

Most obvious is its redesigned screen, which has been bumped up to 4 inches diagonal in a 16:9 aspect ratio that's better-suited to watching videos in their native format, or seeing more content within apps' display space.

Inside, however, there was a lot going on as well. The iPhone 5 incorporated an A6 CPU offering a significant performance boost; support for LTE and DC-HSDPA provided 4G mobile speeds; a beam-forming, directional microphone system to boost sound and reduce background noise using built-in noise-cancellation technology.

There's also a redesigned and enhanced earphone design called the Apple EarPod, and a new, smaller Lightning connector that can be made backwards-compatible with 30-pin devices using $35 add-on converters.

It also provided a flagship platform for Apple's updated iOS 6, which overhauled the company's mobile operating system and introduced a range of features including Maps, which replaces Google Maps in a significant change that encountered major hiccups after launch time. Apple has been working furiously to improve the quality of data in Maps, with reports suggesting many of the most obvious problems have been remedied. iOS 6 also runs on numerous existing iPhone and iPad models.

iPhone 5 pricing ranges from $799 for the 16GB model to $999 for the 64GB model.

www.apple.com.au/iphone

Slimmer, faster iMac and mini

Apple's MacBooks weren't the only computers getting a refresh: the company took the wraps off a new update to its iconic iMac desktop, which not only got a significant feature bump but got squeezed into a housing that has 40 percent less volume and an edge that measures just 5mm thick.

The new iMac includes a first for Apple: its Fusion Drive. This innovative technology combines 128GB of fast solid-state disk (SSD) flash storage and a conventional hard drive, and intelligently shifts data between the two to boost read-write performance dramatically.

Every new iMac comes with quad-core Intel Core i5 processors, 8GB of RAM and a 1TB hard drive, with options supporting up to 768GB of flash storage, faster graphics performance, Core i7 CPUs, and 3TB hard drive.

The diminutive Mac mini also got a boost, with third-generation dual-core Intel Core i5 and quad-core Core i7 processors; 4GB of RAM and support for up to 16GB; and four USB 3.0 ports. Pricing starts at $699.

iMac pricing starts at $1429 for a 21.5-inch model with 2.7GHz quad-core Intel Core i5, up to $2199 for the 27-inch model with 3.2GHz quad-core Core i5.

www.apple.com.au/imac

www.apple.com.au/mac-mini

Retina display, now in 13-inch size

Apple brought the Retina display idea to the laptop with its June release of its 15-inch MacBook Pro with Retina display, but it has now expanded the concept with the release of a 13-inch MacBook Pro featuring a similarly sharp screen at 227 pixels per inch.

It's built around flash rather than hard-drive storage, and offers two Thunderbolt and two USB 3.0 ports to allow users to connect to multiple displays and high-performance devices. There's also a dedicated HDMI port for easy TV connectivity.

The 1.62kg unit starts at $1899 with a 2.5GHz Intel Core i5 CPU, 8GB of RAM and 128GB of flash storage, or $2199 with 256GB of storage. Configure-to-order options include dual-core Intel Core i7 processors and up to 768GB of flash storage.

iPod makeover

Apple's longtime standby, the iPod touch and iPod nano, got makeovers too.

The iPod touch has been given a bigger screen – a 4-inch Retina display to match that on the iPhone 5 – as well as a 5 megapixel iSight camera with autofocus and 1080p HD video capabilities. iOS 6 allows features such as panoramic photos, Siri voice assistant and social-media sharing.

It has been whittled down to just 6mm thin and 88g in weight, with a dual-core A5 CPU inside to provide a significant speed boost. The battery is good for a claimed 40 hours of music playback, while the units come in five colours and include a recessed hook to attach a wrist strap.

The iPod nano, for its part, is just 5mm thick and has a 2.5-inch display as well as built-in Bluetooth for wireless connectivity to cars, speakers and headphones. Built-in fitness features include a pedometer and support for the Nike+ fitness kit. The iPod nano comes in seven colours.

**Don't forget
Apple's education pricing**

Apple Australia offers educational pricing for university students on all its iMacs and MacBooks. For example, the Mac Minidrops by $20; iMacs by $50; MacBook Pro by $120; MacBook Air by $50; and Mac Pro by $250. Discounts are available to university and TAFE students, teachers, administrators, and staff members as well as parents of current, accepted or applied university students. There's a limit of one discounted desktop and/or notebook per academic year. See **store.apple.com/au/**.

AUC memory:

Bringing it back home

By Judit Klein, Auckland
University of Technology

" I might not be the world's best programmer yet, and after
meeting so many of you, I feel completely overwhelmed by
the worlds of experience other people bring to the event.
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conferences like these and give back
my knowledge. "
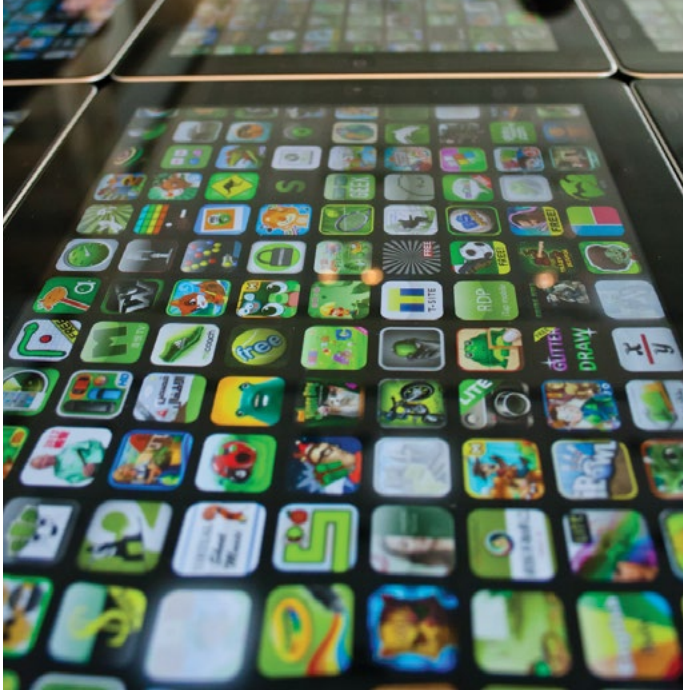
In an age where we're more connected and globalised, it is more important than ever to have a strong sense of community. I've been involved with the AUC for two years and I can say that without a doubt, I wouldn't be where I am today without that community.

I attended /dev/world/ 2010 when I was just starting out in iOS development. A lot of those sessions probably went over my head but I felt inspired nonetheless. I gained some new Twitter followers and started to get a feel for the community. I even had lunch with one of the keynote speakers from Pixar.

As per tradition, the event closed with lightning talks and I had this overwhelming urge to be more than a face in the crowd, I wanted to embrace the community that had been so welcoming to a newbie from New Zealand.

I mustered up the courage to get up and talk for three minutes about the Creative Technologies Degree. It was a way of flying the flag for my university. It had generated a lot of interest over the conference so I wanted to share a bit more about it.

"I might not be the world's best programmer yet, and after meeting so many of you, I feel completely overwhelmed by the worlds of experience other people bring to the event. I've learnt rather than shying away, it is much better to instead embrace that and learn from it, talk to people and hopefully one day I'll be able to come back to conferences like these and give back my knowledge."

Two years, three /dev/worlds, two Create Worlds and two WWDC's later, I am very sad that the AUC won't continue to exist in the way it did up until now. Not so much for myself, but for others students who never had the opportunity.

I know I still have a long way to go but I feel so grateful to have had the opportunity to present twice at /dev/world and once at Create World. It really is an incredible opportunity for students and makes you feel like your work and ideas are valuable. You also learn a lot through having to teach.

Really, it's not just about the sessions, presentations, content of the conferences. It very much is about the community, the socialisation, meeting people with common passions. It is about the time between the sessions, the mealtimes, the conference dinner, the tweets. Everyone is there for a common interest and even when everyone disperses, those connections can stay intact so you can pick up where you left off at the next event.

As Steve Jobs said, it's all about passion: "you have to have a lot of passion for what you're doing because it's so hard that if you don't, any rational person would give up."

Having been a Mac user only since 2009, my passion for the Apple brand and platform have only been fuelled since meeting other like minded people. I love that with my AUC friends: it's the only time that it's socially acceptable to have an iPad at the dinner table or at a bar. I love that you don't look like a dork wearing an Apple T-shirt because everyone else is too, and everyone gets your geek references no matter how subtle or obscure. It's okay to be a bit of a geek, nerd or a dork because we're all in this together.

We don't have a huge developer community in New Zealand. One of the major development companies hosts monthly meet ups at their headquarters, open to anyone (as long as you RSVP on time) but it feels daunting and unapproachable.

There's growing interest at my university in learning iOS development but there's no support. A lot of what I've learned has been self taught but it's been a hard road, not having come from a programming background. I was proud that my university was able to send seven delegates to /dev/world this year who were all so eager to learn. Slowly, the community is growing.

The take home message for me again comes back to this idea of community. It's time for me to take that AUC spirit and create something closer to home. I've learned that opportunities don't just fall into your lap, you have to find them and grasp them, or make them yourself, no matter how crazy or impossible it seems.

I've grown a lot in the past two years, learned lots, had some exciting adventures and met some amazing people that I otherwise probably wouldn't have. Regardless of what happens going ahead with the AUC, I know that the friendships that have been formed will live on and now it's time to fulfill the promises we all made to the AUC to give back, spread all that we've learned and taken away.

My plans are to create an iOS developer's group at my university, and pitch an iOS studio project for the undergrads in my degree next year. I have also been in negotiations with my program coordinator about the possibility of running iOS workshops.

Some of these prospects terrify me, but in a good way. The same way I felt the day I found out about the AUC and the WWDC scholarships. That terrified excitement when a challenge is placed in front of you, and you know that no matter how hard ahead it's going to be, the pay off will be amazing.

AUC memory:

Carrie Clarke, Griffith University

I was sampling the local beer at a pub in San Francisco when I found myself talking to Stephen Johnston, the previous editor of Wheels for the Mind.

He was telling me all about the magazine and I was doing my best to finish the beer, which was rather average. I told him that I was interested in writing an article one day, but I don't know whether he believed me or he thought I was just making conversation. Maybe my enthusiasm was masked by the taste of the bad beer.

It was an AUC get-together before the MacWorld keynote and we spoke about various things, including the rumour that Apple might announce their first phone. It was the 8th of January 2007, the day before they did.

Thinking back, it was pretty special to be in the audience when Steve Jobs announced the very first iPhone. It wasn't just that I got caught up in the Reality Distortion Field. I think many people would agree that this was one of the most significant product announcements of all time.

That was less than six years ago, but so much has changed in that time. To put things in perspective, each day at the conference, I was carrying with me a heavy white iBook G4 and its charger, a chunky iPod with a click wheel and grey LCD, a bulky compact camera and a little flip phone with a tiny screen.

These days, I would just have my iPhone or an iPad, which would do everything I needed those devices for and more. It would be a lot smaller, lighter and more affordable too.

This was a time where most people got their music at a music store, rented movies from a video store, bought books from a bookshop, software from a computer store and newspapers from the shops around the corner. Now, we can do that all on our iPhones or iPads – anywhere, anytime.

Someone at the conference asked me if I was on Facebook. I had never even heard of it, as social media was yet to take off. This was less than six years ago! It is amazing how much things have changed.

At that time, Apple was just beginning to rise in popularity and the iPhone really stood out against other smart-phones on the market. PDAs were reasonably common with executives who wanted mobile access to their email, but most people had no idea that this was even possible. Your mobile phone was fancy if it had a colour screen.

When Steve Jobs unveiled the original iPhone, he described it as an iPod, a phone and an Internet communicator. Since then, we have seen the iPad join it and together, these revolutionary devices have evolved to become many things, including a place to download and consume music, videos, books, apps and iTunes U lectures.

Thinking about it, I depend on my iPhone a lot: every day I use it to check emails, make notes, remind myself about things, listen to music, look up info, check the weather, find recipes, take photos, track exercise, and catch up with colleagues, friends and family. It has changed the way I do so many things. I would be lost without it!

The iPhone wouldn't be nearly as useful without access to mobile data. Six years ago, this was a pretty rare thing in Australia, but we have seen it become hugely popular as more people have adopted smartphones, with speed and coverage continuously improving. In fact, thinking about Internet – six years ago, most people I knew were still using dial-up internet. Broadband was a luxury. Things have certainly progressed a lot!

When I went to MacWorld, the first range of Intel iMacs had just been released. Desktop computers and laptops were beginning to become more affordable for students, but most students

still relied on computer labs at uni to do a lot of their work. Many computers still came with floppy disk drives and DVD burners were relatively new.

At Griffith University, we had less than 10 Mac labs and my job was to look after one dual-boot lab. Yes, one lab. Dual-boot was uncharted territory at the time and it was very time-consuming work, as there were very few tools available at the time.

These days, we have the equivalent of one person looking after more than 20 Mac labs, thanks to the great tools that are now available and more efficient processes. Computers and iPads have become much more affordable for students, and it is great to see them able to easily use their own device anywhere on campus, from outdoor areas and cafes to collaboration zones, lounges and silent study spaces.

The cloud has also enabled us to forget about a lot of things that used to be painful, like syncing and backing up contacts, bookmarks and data. It will be really interesting to see where this leads us in the future. Virtualisation, cloud computing and browser based app solutions are rapidly evolving and becoming more attractive and useful to universities.

It might not be long before a student can easily access all the special software and resources they need for their course on any device, any time, any where. Likewise, iTunes U, podcast lectures and online learning options are rapidly expanding and promoting changes in learning and teaching activities.

Thinking back, a lot has changed in the last six years. With innovation cycles becoming shorter, so much is going to happen over the next six years and onwards. These technology changes are leading universities into an exciting time. Many students have grown up with advanced technology and now that academics have been employing technology for a while, they are beginning to push the boundaries. We are starting to see transformative change, rather than analogue content and processes simply replaced with their digital counterparts.

We have seen huge changes in the music and movie industries, and more recently in the book and newspaper industries. Technology has shaken things up and forced these industries to adapt and deliver content that is relevant, current, interactive and easily accessible. Universities are beginning to change too and this is going to present many challenges and opportunities to advance learning, teaching and research in new and exciting directions.

On a personal note, I would like to thank the AUC for so many fantastic professional development opportunities over the years, including a trip to San Francisco for MacWorld, two trips to Sydney for X World, Mac training, the ongoing support via UniMacTech mailing list and of course, my involvement with Wheels for the Mind. I have met some amazing people, seen some great places, honed my skills and learnt a lot along the way. Thank you.

AUC memories:

Denis Antonellie

Past chair of the
AUC Executive Committee

Denis Antonellie was a long-serving member of the AUC board, who acted as a member of the AUC for 13 years before being elected as Chair of the AUC Executive Committee in 2006. He stepped away from the position in July 2010 when he retired, hanging up on an 28-year career at the University of Queensland. He's now enjoying retirement and on weekends can be found marketing a range of Aboriginal art from a stall at Brisbane's Southbank Markets.

I'm really very disappointed that Apple has taken the move they've made. The AUC was a great benefit to its university members: not only did it provide cheaper or discounted product, but it gave that rebate to the AUC so the AUC could offer programs into the universities.

It's a bit disappointing to me that through the years Apple struggled, the universities within and outside the AUC supported Apple products – sometimes at great effort because people really had to struggle in their universities, and make long and involved cases, to be able to get their hands on Apple gear.

They were in the doldrums and their products weren't always that great – so it's disappointing to see that, now they're on the top of their game, they're not going to support it.

The AUC really got people together. If people wanted solutions to Mac problems with servers, or with desktop, or with iOS – they could always just go through the AUC's servers and ask questions.

Even though it's a vast country, people are used to collaborating with each other, and I think they saw an advantage to having a centralised point of communication. As the Mac developed, education and graphic design were areas where they became very strong. And those were the areas universities wanted to exploit – so having people around with that knowledge was quite valuable.

They got a lot of discounted, subsidised training for their staff and students out of the AUC. Some of the things they had – iOS coding, technical training courses, X World, CreateWorld, /dev/world and so on – were of great benefit for people.

Back when I had my time as chair, CreateWorld and /dev/world started. We got deeper into the student scholarship program, where we elected two or three students every year and supported them through their course at university. We got a better hold at that stage, and through those years we had quite a bit of money coming through so we could put it to pretty good use.

We also started to get people into the fold more, with more and more people on campus who were trying to help the AUC. That's the other thing I have to say about the AUC: the people in it, the executive, the delegates all gave their time freely and they were all great people, devoted to getting the message of the AUC across. In fact, it's been all the people that have held the AUC together.

I'd particularly like to acknowledge the contribution by Andrew Jeffrey. The paid employee position, which Andrew holds, provides the lynch pin for the AUC. It provides a central contact point for the executive, for delegates, for member staff and students, and also concentrates the many administrative functions of the AUC in one individual. It was a very good decision taken by the AUC, some years back, to employ a full time executive officer, and Andrew has successfully carried out the duties of this position for a number of years.

If you look around universities, you see that there aren't any great Apple programs out there for students, whereas the AUC tended to take students and include them in training courses so they had experience developing in iOS and so on.

I just don't know where Apple can sit down to get young student developers from in the future. They'll all be there, but they won't get the sort of training they got in the AUC, because the AUC included them.

This meant the AUC was able to get a number of interns into Apple; Australia was the first country outside the US to achieve that. But Apple is not going to see that talent because it's not going to be at WWDC any longer; most students don't have the money to pay to go to WWDC, and I don't see that Apple is going to put the money forward. Especially in educational institutions, the money is going to be sunk back into their marketing.

The universities and Apple will realise, some time after all this has happened, just what they've all lost. However, I remain an Apple user and wish all AUC member universities and Apple every success for the future.

Stephen Johnston
Past editor, Wheels for the Mind

Stephen Johnston edited Wheels for the Mind from 2003 through 2008, overseeing a major redesign of the magazine as the AUC expanded its scope to be more inclusive of students as well as its traditional base of staff and academics. During his tenure he was an IT executive with Edith Cowan University, and until recently worked as a recruitment consultant with Chandler MacLeod.

It was a privilege to be involved with Wheels for the Mind. When I took over, it was predominantly aimed at technical staff. I wanted to increase that to include students, and make sure there was a younger readership involved. So we redesigned the magazine, made it a bit more colourful, and a bit more of a coffee-table format. Seeing that being picked up in universities was a great joy for me

Working in the AUC executive was awfully fantastic. I'd see how it all came together, and all the good work that people were doing – basically in their own time – spending lots of time and energy producing things in sometimes difficult circumstances, because they had other jobs to do.

It was a privilege for me to be a part of that, talking to people across almost 40 universities. It gives you access into the beating heart of universities wherever Apple products were. All the people I met and talked to, at the AUC when we had a conference or meeting people, would recognise the editor's position and were always thankful for being approached for stories.

I found the respect for Wheels that was out there, to be fantastic. Many people thought they weren't allowed to contribute. Once you approached them and told them they could, you would see their eyes light up. I recognised the absolute joy it gave them: when people get in print to show off their work, it is a fantastic thing for them.

The AUC will be missed. You don't know what you've got 'til it's gone, and when it's gone people will realise the lack of conferences, workshops, communication, camaraderie, and fellowship – even the fact that you've got someone else in another university that you can call because we're all connected together. You can't get any better networking than the AUC did physically, and it's all built around the love of Apple products and technologies.

When you've got excellence, you've got to be very careful about closing that down. We're disbanding a prime example of world's best practice around a network actually happening, really functioning well, and honestly and openly with all the right motives.

It's a very, very sad day. The AUC didn't run its course; I think it could have gone on and been beneficial, and changed and adapted. There were many years' life left in it. And when you close something down, you've got to have something that replaces it and is better; if you don't, then you've lost something.

Paul Bourke
AUC co-ordinator,
University of Western Australia

Paul Bourke, currently a Research Associate Professor and Director of the iVEC high-performance computing centre, has been involved with the AUC for nearly 20 years – first with Auckland University, then with Swinburne University. Most recently, he moved to the University of Western Australia (UWA), where he serves as AUC delegate and AUCDF coordinator. Paul has been regularly featured in Wheels for the Mind for his innovative work in areas such as dome projection.

When first reminiscing about my involvement with the AUC I was suddenly surprised to realize that it spans about 20 years, in addition to being across two countries and three academic institutions.

An AUC delegate and AUCDF coordinator at The University of Western Australia in the last days of the consortium, a frequent substitute for the AUC delegate from Swinburne University in the early to mid 2000, and finally as a frequent attendee and speaker at the AUC academic conferences going as far back as the early 90's while employed at Auckland University.

There are some interesting coincidences between my experiences with the organisation and my career. My very first trip to Australia was to attend an AUC conference in Wollongong in the early 1990s; not only has Australia become my home, but Wollongong is one of my most visited cities due to an ongoing collaboration with the Wollongong Science Centre and Planetarium.

In 1995 I returned and presented at the academic conference at The University of Western Australia – my first trip to Perth – not imagining at the time that I would take up employment there.

As with many of the older brigade in the AUC I was an early registered Apple developer in New Zealand where I purchased my first Mac 128 from the USA in 1984 (at that stage it wasn't yet available for purchase in NZ). It wasn't possible to develop software directly, but fortunately my employer had a largely unused Lisa so I cut my software developer's teeth with cross compiling.

In the subsequent years as I worked on probably every Mac model ever manufactured I moved from one language to another, obscure compilers now lost in the mists of time: Hippo C, Absoft Fortran, Modula, and even flavours of LISP and Forth.

I was employed at the time by the University of Auckland School of Architecture, Property, and Planning as Computer Manager. The Apple range had a clear advantage in the area of computer graphics – an important consideration for what was a design school – and for many years we lead the way within the University in computer deployment to staff and even within student studio spaces.

But we were largely operating in a vacuum, so it was encouraging to find a community discussing and facilitating the use of Apple products in academia. It was even more encouraging to learn that many of the approaches we were taking to integrate (Apple) computers and the Internet into the teaching program were leading edge, not only within New Zealand but also across the ditch. A, now quaint, abstract for a paper presented at the AUC conference in 1995 is still online albeit in my "oldstuff" category (see http://paulbourke.net/oldstuff/auc1995/).

I do remember a significant outcome of this presentation was the connections it created between the attendees from Auckland University and like-minded academics from Australian Universities who were starting along similar paths.

While the final AUC mission statement has an emphasis on the advocacy of Apple products on campus, the section that reads "share experiences amongst

AUC memories: continued

other tertiary education institutions" has surely been its main success. I personally believe the collaborations arising from the original academics conferences, and more recently the various more targeted conferences, as the greatest contribution of the AUC to the partner institutions.

Peter Houtmeyers
AUC co-ordinator,
Charles Darwin University

*P*eter Houtmeyers serves as VET & Higher Ed Course Co-ordinator at Charles Darwin University in Darwin. He became involved in the AUC three years ago and now serves as the university's AUC Co-ordinator. One of his recent projects, a student-led iBook documenting an art installation at the Casuarina Shopping Centre, was featured this year in the digital edition of Wheels for the Mind.

I've been going to the AUC events for nearly three years. From the outset, they were very welcoming and very informing as to what, as a new delegate, my role would be. This is one of the things that's so precious about the whole AUC consortium – the universities that come together. It's a really friendly and inviting experience.

From my relationship with the AUC, and the network I've built up, I'll have enduring relationships and collaborations with universities in Perth, Hobart, New Zealand, Sydney – and some of the more regional universities. It really does bring everyone together.

Especially in a regional university, collaboration is always a challenge. But those staff and students who have attended the /dev/world, X World and CreateWorld, have come back with a really great sense of community and a rewarding experience of training.

For example, my technician is in the IT department and runs our Mac labs. He lives in a room and comes out every so often when he's got to fix things. But he has this whole world of issues he's dealing with, and just that two or three day conference and event gets him so inspired – because he is talking to people who have the exact same problems and are dealing with the exact same challenges he has. That is really valuable.

So for me, and I suppose for all the delegates, that's one thing we don't want to lose: that sense of a network, and that sense of losing all the achievements made to date.

The enthusiasm and passion of the people involved in the AUC is remarkable: Tony Gray, and David Yammouni, and Stephen Young, and all the others involved in the AUC – they put so much time into it, and do such a great job. I really hope there is a future for the AUC.

Nick Falkner
AUC Committee Member,
University of Adelaide

*N*ick is Associate Dean (IT) for the School of Computer Science within the Faculty of Engineering, Computer and Mathematical Sciences at the University of Adelaide. He was elected as an AUC committee member at the recent AGM after involvement with the organisation that stretches back to 1999, when he was a system administrator looking for support from fellow Mac enthusiasts around the country. His subsequent involvement included attendance at numerous training seminars and a trip to Apple's WWDC in 2010.

I got involved in the late 1990s, and stood in at one of the meetings when I was still a systems administrator, to talk about what was going on. That was before one of Apple's big patches of growth.

What always struck me was that people were really happy to talk, and to help you sort out the problems that you might not have had a chance to talk out with other people. That whole notion of a really big support community, where people were really generous with their time, knowledge and resources – that's one of the things that always struck me about the AUC.

And it's one of the reasons I've now moved into the executive. There's nothing quite like the AUC: there's not an organisation that spans Australia and spans all the institutions, and has people in academia, and people in the professional staff, or in this school or that school, that are all willing to get together and help each other out.

It's a one of a kind organisation because everyone has this common idea: that we just want to get this stuff working, and want to support each other if we are perhaps not getting supported locally.

There's a steep learning curve in some of the technologies we work with, and having the chance for people to say "I can do that" is great. I showed up at the Unity workshop recently, and finished that day, and was up all night in my hotel room playing with the software.

I love my job, but the number of days when I can sit down and think I'm going to have fun with a tool, and I'm going to stay up all night working at it and I'm going to go back and play with it some more with a group of interested people – I normally create those experiences, but I very rarely get a chance to enjoy those experiences.

WWDC in 2010 was amazing, too. It was like drinking from a firehose; I'd never seen anything like it in my life – this whole notion that you can go along and speak to the people who have created the product. It's almost this ideal state of resource and information availability – it's the most fantastic experience, and I was lucky enough to see Steve Jobs doing the iPhone 4 demo.

I loved the opportunity to go speak with like-minded people, to kick back and enjoy the technology and delight in the experience and the exploration and the creativity of it – the AUC provided a lot of opportunities for people to give back a bit too, to go back with the joy of just mucking around with things and producing something creative. It wasn't just wasting your time: every time you did something, you got something you could make better or share with somebody else.

I've been involved with a lot of different organisations over the years, and I really think there's nothing quite like the AUC in terms of what it did. And right now my goal is to keep it going. We look at this as an opportunity to decide on the things that we think are really important, and to focus on them and to keep going forward and to keep offering at least some of the things that we've been offering up until now.

We've got a lot of enthusiasm, and a lot of passion, and enough people who are interested in keeping it going. That's the AUC: just such a friendly group, and a great community.

Iain Murray

*I*ain Murray is a Senior Lecturer and Course Co-Ordinator for the Bachelor of Technology (Computer Systems & Networking) and works in the Rehabilitation Engineering & Assistive Technology Research Laboratory of Curtin University of Technology's Department of Computer & Electrical Engineering. Iain first became involved with the AUC ten years ago, serving as AUDF Co-Ordinator until the AUC delegate position became open due to a retirement. He remains Curtin's AUC delegate.

My work has been to do with vision impairment and accessibility. I started off writing a screen reader for OS X before Apple actually had one, and pretty much had an AUDF grant every year up until around 2007. We were doing a lot of different things, such as a network simulator you can use by voice only.

There were projects jointly with Curtin and the Association for the Blind, and I had three vision impaired students who were heavily involved in the AUC from a student perspective. One of them, Kieran Eaton, is now the senior software developer for the Association for the Blind, and has developed a very large library system for visual talking books, plus the first DAISY talking book reader for the iPhone.

Another, Josh Giblet, went to WWDC once and has continued to work with me on little projects throughout his studies. I remember when I and two of my blind students travelled to San Francisco for WWDC on AUC scholarships: as the students were classified as having a disability, we got to sit in the front row of the keynote (by Steve Jobs) without queuing.

We wouldn't have gotten started with Apple technologies if it wasn't for the AUC. I originally didn't like Macs at all because they were completely inaccessible. But with the release of OS X, things improved, and I was a convert from Unix.

The very first grant we received was an ADC membership and an early iMac. With unis there was no funding for anything, and if I hadn't gotten to the AUC there wouldn't have been any.

We always had a full contingent of students going to most of the AUC conferences. We've already filled our CreateWorld seats for this round, and have four more students waiting to see what happens.

It was a good move, focusing more on the students than the academics. It's more productive: academics tend to be academics, whereas students are able to achieve a goal.

Daniel Woo

*D*aniel Woo's involvement with the AUC stretches back to the early 1990s, when he was experimenting with Apple Newtons and the configuration of Mac-based labs, in a time when they were a relative rarity. His work in exploring Apple's Mac OS X platform led him to teach the AUC's Cocoa courses for many years, and he was extensively involved in teaching students and promoting cutting-edge, student-led projects. An Apple Distinguished Educator, Daniel dialled back his involvement with the UNSW School of Computer Science and Engineering earlier this year, and now runs an iOS consulting company called UXED while retaining an honorary post with UNSW.

There have been a lot of wins for the AUC from a student perspective. We've created this amazing, unique opportunity for students to go to places they would not have taken themselves. For me as an educator, we've done something that has national significance and has fed into the ICT economy of Australia.

That was one of my visions, and the AUC was the most fruitful opportunity to reach students nationally. We could influence them in ways they weren't even thinking about. Several students have come back

and said to me that "If I hadn't done your Cocoa course, I wouldn't be here today."

The strength of what I delivered came from the fact that I wasn't just a hardware engineer; I do software and design, and everything in between. The AUC gave me the opportunity to continue pushing those skills, and to help students jump on the bandwagon and launch them.

A lot of companies have AUC students in there, and several students in the US. You have the Secret Lab guys from Tasmania, and Comic Life, and more. I think we all did an amazing job to do something that has been so unique in the world. There is no other network that I'm aware of that talks nationally like this. And remember that it's a bunch of volunteers. It was a lot of individuals working together in different teams to produce a really positive outcome.

X-World, for example, connected IT staff across the country. It was a really important thing, to build a network of support staff who can support Mac and iOS technologies across the country, and share information. The brand of X-World is quite strong in the community, and those same sorts of things – how do you deploy Mac labs, or put iOS devices out there – still need to be discussed.

We really won there, and this is a direct return of trying to take the education funds, and put them back into education to deliver even more education outcomes. It was done very well for what little funds, and the smaller organisational structure, the AUC had.

I have many fond memories of the AUC, which came hand in hand with what I was doing with the rest of my teaching and research. It built upon a project I did with Apple ATG back in 1992 on A/UX, and my own mobile journey with Apple Newtons. In 1999 I had just finished my PhD and was asked to do a 12-month fill-in to teach microprocessors at UNSW. The next year, I went to my first WWDC.

I was involved with HCI@UNSW, the first student laboratory in Australia to deploy Mac OSX and to be delivered with the new 17" flat panel screens. We had just designed a new student teaching space which gave every student in the tutorial a computer – a G4 tower – on their desk. At the same time, we were trying to get Mac OS X Server up and running, and were reporting back to the AUC about what was possible.

I was also doing work with speech technologies on Mac OS X, and presented a paper at the AUC Wollongong conference. I also presented a paper on speech technologies at AVIOS in San Jose, concurrent with WWDC, and spent time with the Apple speech group.

Ultimately I attended WWDC for 13 years, the first few sponsored by the AUC.

I was also working with NIDA to bring this new device called an iPod into the voice studies programme. I could see the future of recording and playback devices in education for acting students. In early 2000 I put forward an AUC grant proposal for getting Australian text to speech – Australian Macs in education needed to speak with an Australian accent – but was rejected.

At the same time I had been ramping up on Cocoa and Objective-C, encouraging my thesis students to undertake projects using Mac OS X. We had a great collaboration with the School of Chemistry to connect spectrophotometers to a desktop.

Most computer science students were Unix or Windows, so many never had to say 'Mac OS X'. But students were being exposed to the Aqua UI. The Mac had support for accessibility, such as screen magnification. There was enough momentum to kick off a formal course in user interface design based on Cocoa in 2004. A subset of this became the AUC Cocoa course in 2005.

In the future, it would be exciting for it to continue its educational purpose by being able to help students adopt iOS, Objective C, and even to some extent growing it to teach Web technologies. But there are challenges as to what the universities will be willing to do, since they bought into the AUC because there was a minimum spend and that contract with Apple.

Now that has gone, it changes the nature of the organisation. For example, we're not going to be sending 20 to 30 students to WWDC anymore – and that's a big game-changer for students, who have gone and said their lives changed by going there.

We have developer programs within the AUC, and have CreateWorld, which has interesting things and could be even more amazing. The creative audience is a many-faceted community and a hard one to bring together. It would be good to keep that, but it's also about how you expand this, and grow it in some way that's meaningful without substantial income.

Every year, Apple has continued to provide tools that enable us as educators and researchers to do new and exciting things to push the boundaries. But there has also been an underlying story in the operating system and frameworks. Apple has provided technologies under the hood to make it possible to build amazing software.
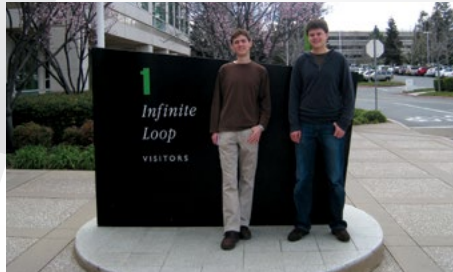
Zac Cohan

Zac Cohan, along with friend and business partner Nik Youdale, has been a longtime supporter of the AUC. He found out about the organisation while still in high school and hit the ground running once he started uni and was eligible to participate. Zac and Nik – who attended Macquarie University and UNSW respectively – were regular recipients of AUC WWDC scholarships. As their skills grew they came to give back to the community – running a dozen AUC workshops in 2011 alone, on the back of the success of their Picturesque and Soulver applications, developed under the moniker Acqualia Software. Zac is currently pursuing his PhD and Nik is working as a software engineer with social-media startup Posse in Sydney.

The AUC really defined the first few years of our university life, and was the highlight. We found out about it in high school, and it was so exciting that there was an organisation that could help us out with writing cool apps – and that would potentially send us to America.

I drove up to Frenchs Forest, where Apple used to be headquartered, and asked to speak to Andrew Jeffery, and asked him if we could apply as high school students. I showed him the app we were working on, and he was kind but said 'come back next year'.

So we did. We went back to the AUC next year and met Daniel Woo, who for us was really a kind of mentor figure. He was really positive and had that supportive attitude towards us. My impression was that his whole reason for being was to care for students and young people, and to inspire and help them. He is really up there in my fond memories of the AUC.

I went to one of Daniel's Cocoa workshops in my first year in uni. At that point I was getting my head around Cocoa but didn't fully get it yet. Those two days with Daniel pushed me across the line – and that was my experience of an organisation that was going to teach you the things that uni wasn't going to teach you.

The Unity workshop was pretty good, and there were the amazing scholarships we got to go to the US. WWDC is like Disneyland for programmers, and the first time we went – in 2006 – it was mindblowing.

I had been watching Steve Jobs keynotes since I was young, and suddenly I got to go to one, and be taken to Apple, and sit there at Infinite Loop, and talk to Apple engineers. That was a huge experience and an instrumental part of our journey to the developers' world. Before that we were really isolated and didn't know anyone in the community. But when we got to WWDC, we got to meet so many other people like ourselves, and got to understand how everything worked, and how the community worked. It was brilliant.

I remember, when we went to WWDC, telling people about this organisation, the AUC, that does things like that. They were blown away, and there didn't seem to be anything else like it in the world. We were just born in the right country, at the right time, and developing for the right platform.

The other thing about the AUC was that it gave us an opportunity to teach. We did three sets of workshops last year, around 12 workshops, which was awesome. I don't know how else we could possibly have gotten this experience: we were able to fly around Australia, and develop the course, and give workshops to 20 to 30 people. We had so much fun doing that.

So, the AUC has been this incredible organisation that teaches and inspires. Andrew Jeffery, and Dennis Antoinellie, and Daniel – those guys were great, and gave us a lot of support and encouragement.

Since uni, our products have been going well. Picturesque was the first app of its kind but in the last five years there have been buckets like it, and we have been putting our energy into Soulver, our calculator app. The iOS version is doing well, and the Mac version is doing great. That's keeping us going.

The AUC's push to increase student participation in recent years has paid off handsomely, with its role as an incubator for student talent reflected in the commercial successes of a number of AUC-supported projects. Here are a few of the many notable successes:


Picturesque.

The dynamic duo of Zac Cohan (Macquarie University) and Nik Youdale (UNSW) started working on this batch image-processing app before they began uni, and by 2007 – with the support of the AUC – they had released a Mac OS X app that went on to gain a huge profile and was hand-picked by Apple as a featured application. Picturesque has been updated through the years and is now available through the Mac App Store in a Mountain Lion-compatible version marketed by Zac and Nik's company, Acqualia Software.

Secret Lab.

Once University of Tasmania student developers, Paris Buttfield-Addison, Peter Lyle, Jon Manning and Nic Wittison were regular participants and presenters at AUC events, as well as receiving numerous AUC scholarships. Buttfield-Addison and Manning now run Secret Lab (**www.secretlab.com.au**), an iOS-focused development studio that also runs regular iOS training courses for the public. Secret Lab has produced apps including Meebo for iPhone, ABC Play School Art Maker for iPad, ABC Good Game for iPhone and ABC Foodi for iPad.
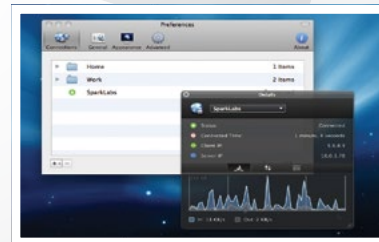
Viscosity.

Viscosity, a full-featured OpenVPN client, is published and maintained by Bathurst-based SparkLabs. SparkLabs was founded by James Bekkema, a Charles Sturt University graduate, frequent AUC presenter and current PhD student whose past receipt of an AUC Innovation Grant saw him working to develop a games engine for use in teaching. Viscosity – a Mac and Windows client that supports OpenVPN, L2TP, PPTP and IPSec – has developed a strong following and was recently adopted by global VPN provider WiTopia.

Soulver.

Designed as a simple tool that can answer any mathematical question, Soulver incorporates a broad range of functions ranging from simple and complex calculation, to currency and unit conversions, to share price information and more. Also developed by Zac and Nik and marketed through the mac App Store and Acqualia Software, Soulver's natural-language interface has evolved over time and integrates live data from the Internet into its calculations. Soulver is available in Mac OS X and iOS versions.
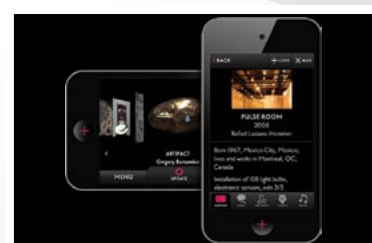
Art Processors.

Scott Brewer received AUC scholarships to WWDC in 2007 and 2008, and throughout his uni years remained involved with the AUC in various ways. He has parlayed that work into a role as CTO and co-founder of Art Processors, an iOS development house that is focused on delivering new visitor experiences using mobile devices. Art Processors' debut app, The O (**www.mona.net.au/theo/**), has been picked up by Hobart's Museum of Old and New Art (MONA) and has been used to view more than 19 million artworks. It has subsequently been evolved into an open Enso Platform. Scott shared his story at /dev/world in September.


DigiMacq.

Longtime AUC advocate, UNSW lecturer and developer Daniel Woo led a team that worked with the Parramatta City Council to design and deliver an engaging iOS app to be used during a walking tour of the city. The app, called DigiMacq: Parramatta and the Spirit of Lachlan Macquarie, combines historical images, narrations and other content into a graphical interface that brings the city to life through the eyes of early governor Lachlan Macquarie. Content was keyed to combinations of symbols posted on signs around the council area. DigiMacq emerged in 2010 and won the Judges' Choice Award at the 2011 Interpretation Australia Awards for Excellence.
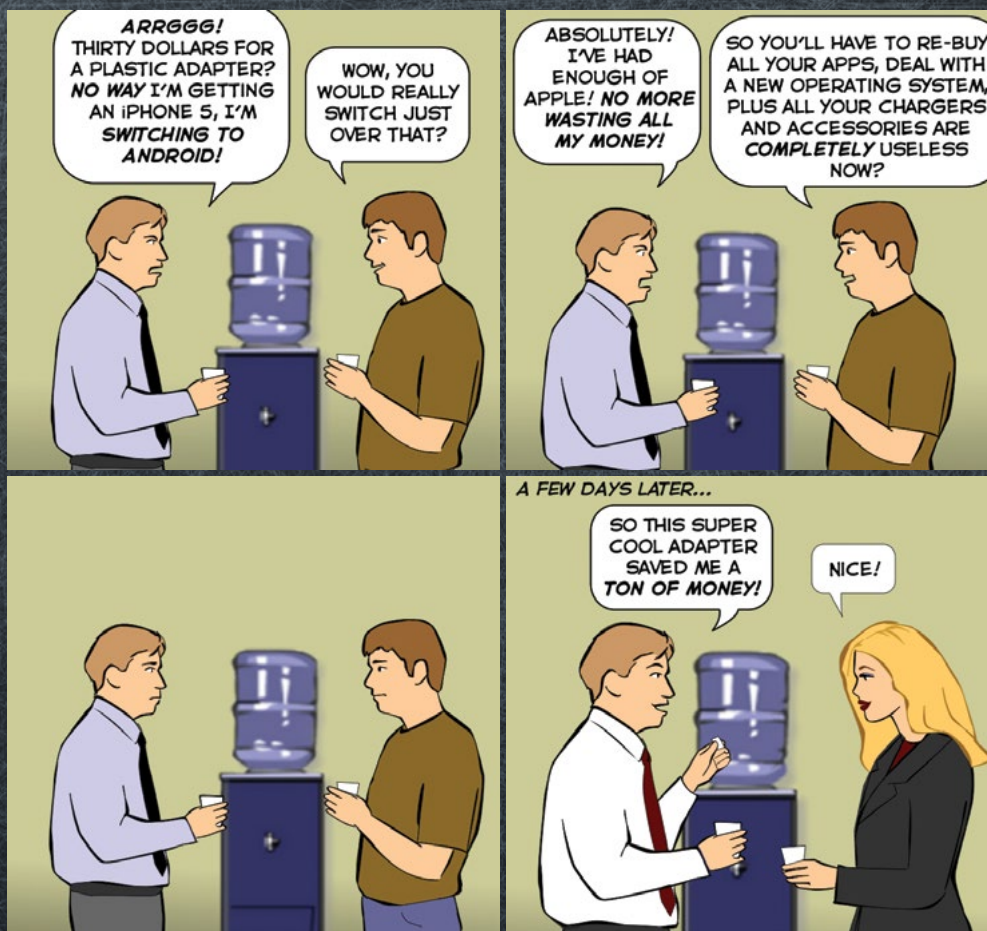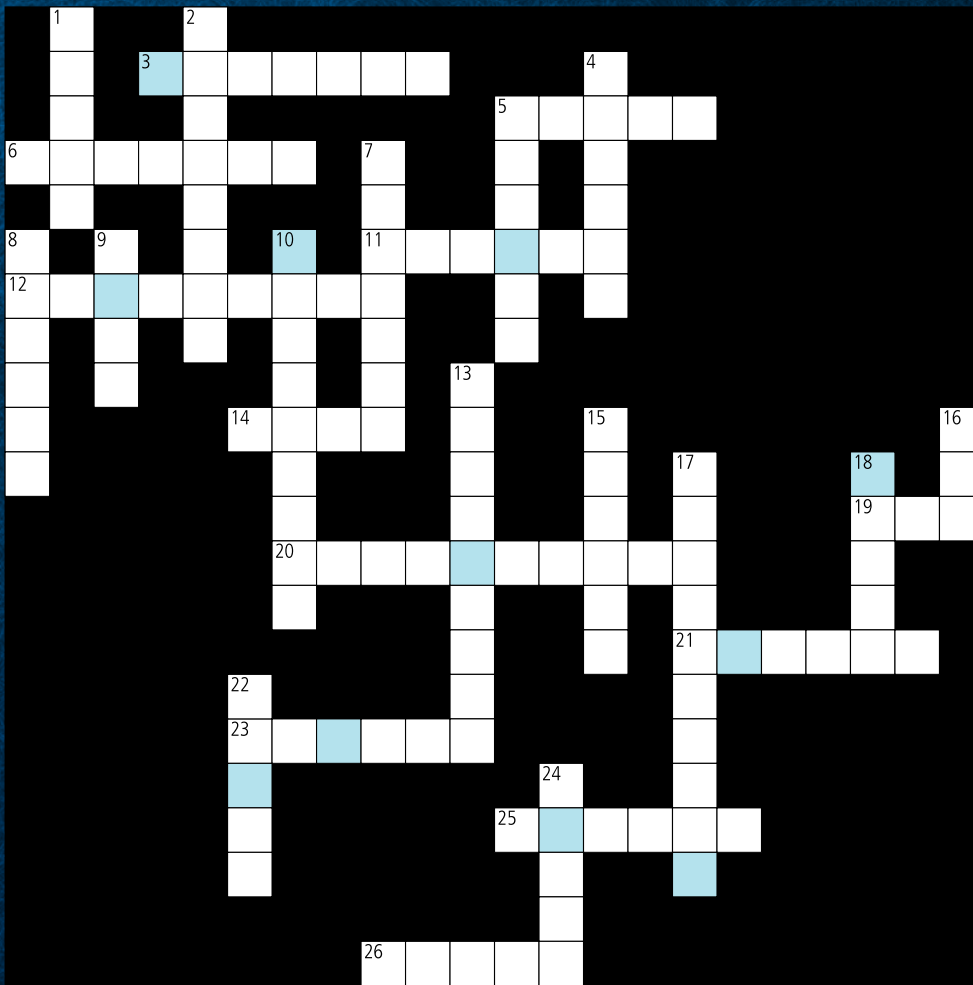
Crossword Competition

For your chance to win an iPod nano, complete the above crossword (you'll find the answers throughout the articles) and take the letters from the blue boxes then re-arrange them to form a word or phrase.

Send this to: **crossword@auc.edu.au**

Competition closes at **5pm on Friday, December 21, 2012**.

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