

NEWS FROM COMPUTER SCIENCE AND ENGINEERING

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BETA

Free as in speech and our awesome BBQs.

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FEATURED, TECHNOLOGY

Windows Surface Pro 3

Microsoft revealed its latest installment of the Surface line of products on May 20th at a private small gathering in New York City; the Surface Pro 3. If you aren't familiar with the Surface concept, it is an ambitious vision which Microsoft continues to push towards consumers: a world where the majority of technology users no longer have the need to carry both a tablet and a laptop during our daily commutes. It has the appearance of a tablet with its thin slate body, yet it is not one, it has the innard specifications of a laptop, yet it is not one either - rather, it nests somewhere (un) comfortably in between.

Whether you are a poor university student, a corporate white-collar worker, or a stay-at-home parent; the matter of the fact remains that tablets have predominantly been used for the consumption of content (e.g. watching movies, browsing the web, playing Angry Birds Star Wars), while a laptop is reserved for content creation (or bluntly put - "getting work done"). Now in recent years there have been large advances in the tablet industry for "productivity" such as bluetooth keyboards, office suites, styli with digitisers (not that rubber nib variety thank you very much). However, I

have yet to see a conventional Android or iOS tablet that can truly replace the experience I have on my laptop, although the Surface Pro 3 attempts to do so.

Before I go into the nitty gritty of the device, it's important to remember that Microsoft is pushing this as a laptop competitor. Though that seems to contradict all the time I spent criticising the limitations of the current market tablets; the fact that Microsoft spent so much time comparing their new device to the MacBook Air 13" seems to confirm this.

SPECS

Now onto the spec goodness; the Surface Pro 3 is running Windows 8.1, 12.0" diagonal screen with a unique 3:2 ratio (this is important, but I will touch on it later), 2160x1440 resolution, and is available in multiple configurations of 64GB, 128GB, 256GB or 512GB SSD storage, 4GB or 8GB (LPDDR3) RAM, and i3, i5, i7 Haswell Intel processors. In terms of connectivity, there's a single USB 3.0 port, Mini DisplayPort, headset jack and a microSD card slot. On paper it seems like a remarkable device, these are specifications that can rival current Windows ultrabooks, and appears to

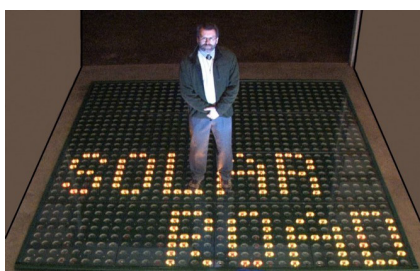
be a serious contender with the MacBook Air 13" (which did I mention is actually heavier than the Surface Pro 3 - 1.35kg vs 0.8kg). Apart from being incredibly lightweight, it is also a thin device (9.1mm), including an N-Trig pen with a digitiser that supports up to 256 levels of pressure sensitivity, as well as 5MP front and rear-facing cameras. Those specs in combination with the new 3:2 aspect ratio and the Windows home button moved to the side encourage the portrait use of the device, giving the Surface Pro 3 tablet-like properties. The stylus features have also been improved with an eraser and copy button integrated into the pen itself, and a neat feature which allows a user to double-click the pen to automatically activate the device from a standby state and launch straight into OneNote.

In addition to the device itself, what really propels the device into competition with current generation laptops is the Surface's trademark Type Cover. Staying true to its name, this is an accessory that, while it has the innocent appearance of a traditional tablet cover, also serves as a fully functional keyboard. This includes physical back-

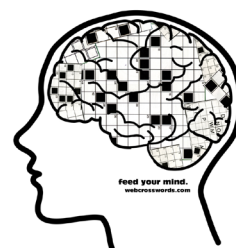
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FEATURED, TECHNOLOGY

Windows Surface Pro 3 - contd.

lit keys and an improved ceramic finish touchpad with increased surface area and reduced friction from last gen. All of this is contained within the thin form factor of a mere 5mm. One

end of the spectrum more designed for sketching, note-taking, or tablet use. Additionally, the Type Cover is included with a magnetic strip which “lifts” up the keyboard so that it does



complaint from last year’s Surface Pro 2 was that the device’s “lap-ability” (as Microsoft chooses to coin it), was incredibly limited due to its thin yet malleable Type Cover keyboard, and limited 2-stage hinge mechanism; making any attempt at productive work on with the device on your lap a chore. This year Microsoft has rectified that with hinge that has been labelled as having “full-friction” so that it can be adjusted from anywhere between 22 to 150 degrees with ease. The latter

not conform to the shape of your lap.

CONCLUSION

So given all this, how could anyone not be excited about this device? Well therein lies the biggest flaw of the Surface Pro 3: what is it?. Whenever a new product enters the market it is usually met with skepticism (I think back to Steve Balmer and his comments on the iPhone), and the Surface vision is no exception. One cannot deny that this is a genuine feat of engi-

neering, stuffing ultrabook equivalent specifications into the form factor of a tablet. But at the end of the day, the Surface Pro 3 is still a compromise; its keyboard travel and stability is not on par with other laptops, and it is almost the double the weight of an iPad Air.

As much as Microsoft wishes that this will be compared to ultrabooks and MacBook counterparts, this is a market which consumers are not used to, and with this newest release I believe we’re only touching the surface here (sorry couldn’t resist!). I will leave you with one comment (courtesy of reddit) that I believe sums up the reception and buzz surrounding the Surface Pro 3 beautifully:

“The one thing I think most people don’t get is that it’s not supposed to be a better tablet than the iPad and a better laptop than a MacBook. It’s supposed to be a better laptop than an iPad and a better tablet than a MacBook, and it absolutely excels at both”.

JONATHON KIM SING

NEWS

News in Brief

South Korea Woman keeps dead husband’s body in living room for seven years

47 year old Cho apparently preserved the body of her husband for seven years, according to China Press. Her and her children had been talking and even saying goodbye before going out as usual. Police said that when the body was laid on the floor in the living room and covered with a blanket as though it was sleeping. The body was also fairly clean and well maintained, and showed little signs of decomposition. Cho, who runs her own pharmacy, was believed to have used her professional knowledge to embalm the body. She was declared free of any criminal conduct by police after the body was discovered.

China Woman scratches 600 lottery tickets in 5 hours

A young woman from Wuhan, China, refused to pay up after scratching 600 lottery tickets. The incident last Monday saw the 23 year old initially asking for 100 tickets, priced between 2 and 10 yuan each from the counter. She was reminded to pay up two hours later before the worker finished his shift. However, she persisted and delayed payment. Later, when she was again told to pay up, she boasted that it was normal for her to scratch tickets worth up to 2,000 yuan each time and she would always pay. When she had eventually scratched about 600 tickets, she admitted that she only had 100 yuan on her. After taking into account all the winning tickets, she still had to fork out 1,525 yuan. She was arrested

by police and slapped with a 10 day detention for defiance and causing an affray.

Jet pack demonstration at ‘Future is Here’ Festival

A man wearing a hydrogen and nitrogen-powered jetpack blasts through the Ronald Reagan Building in Washington, D.C. Federal clearance was required from the FAA to fly the jetpack as airspace is tightly controlled so close to the White House. Usually, the FAA prohibits nearly all types of non-government aircraft, from hang-gliders to remote-controlled planes.

Tony Abbott Cycling Group Has an Accident

Prime Minister Tony Abbott’s cycling group was involved in a biking acci-

NEWS

News in Brief - contd.



dent this morning after hitting an oil slick on the road.

Several cyclists fell off their bikes and hit the road hard. A spokeswoman for the Prime Minister said one of the cyclists broke a collarbone. The Prime Minister was unharmed.

The accident first hit social media

after Glenn Druery, a keen cyclist, who is known for his work organising preference flows for minor parties, posted that his group had hit a diesel slick first and that then Mr Abbott's group had also fallen foul of the hazard. "His mate broke his collarbone. Fortunately the PM rides with a medical crew in a big black car."

Netflix coming to Australia

The Australian reported this week that Netflix was considering an official launch in Australia next year. An estimated 50,000 to 200,000 Aussies already use the service by bypassing geo-blocks and essentially tricking their computers into thinking they're in the US.

China jails gang selling poisoned dog meat

A court in central China sentenced 11 members of a gang to jail for selling meat from dogs they hunted with crossbows using bolts dipped in poison, state media said yesterday. The gang killed around 1,000 dogs last year using bolts dipped in a highly poisonous chemical, called succinylcholine chloride, and stored their meat in a freezer. Police raided their storehouse, and seized 12 tonnes of frozen dog meat, but the meat from about 10 dogs had already been sold. The members of the gang were convicted for the tale of toxic and hazardous food, receiving sentences between one and seven years, and fines between 3,000 and 350,000 yuan.

DYLAN KELLY

TECHNOLOGY

Solar Roadways Driving the Future

The future is always worth investing in

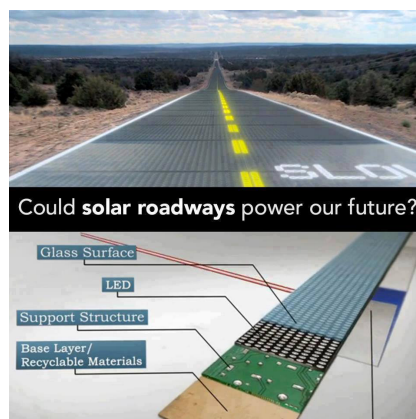
The idea is simple: replace the cement in every road with a solar panel with a plastic coating. It would be able to fuel all the electricity needs of the country and then some more. There would be no need for the coal and oil industry that destroys the environment daily. We would have achieved an environmentally sustainable solution to the energy crisis. Energy and fuel would be far far cheaper than it is in its current state (where it is rising at a faster rate than most families can keep up with).

Besides the actual solar benefits, there would be other benefits. The plastic coating can be designed to have a high frictional coefficient, making it appropriate for roads and safer than cements that commonly degrade over time. LED lights can be installed with minimal power usage to act as road lines. The advantage of this is that the road lines won't need to be manually repainted, but instead just reprogrammed (and maybe even dynamically adjusted according to the time and

traffic conditions). The lights would be able to adjust to the weather conditions to ensure maximum visibility and safety of the passengers. They can also have heat emitters which would be perfect for countries like Canada and USA where snow can make driving very hazardous. Sensors can be installed to check road and traffic conditions. There are many many more reasons for why solar roadways are the way of the future.

The argument that one thinks of first would be the issue of cost. Yes, installing solar panels on every road would cost a significant amount but since it is solar powered, it would be constantly generating power and the investment

would pay off after a certain amount of time, much faster than solar panels on houses as roads cover much more of the landscape than houses.



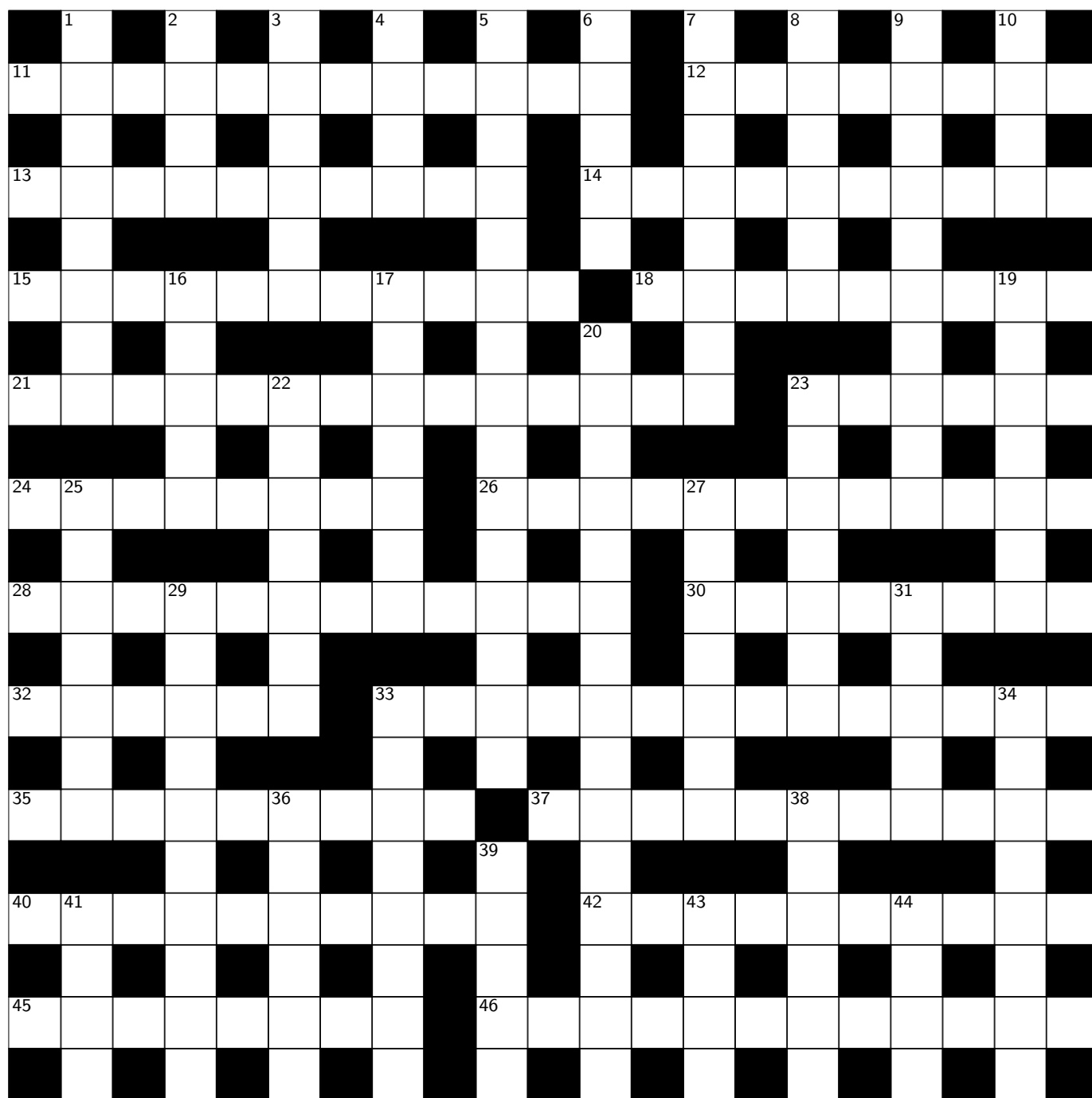
We can get tangled in debates about prices and whether it justifies its worth but to me, the problem is simple: we cannot keep using the energy technologies we rely on; it just simply is not sustainable. The only debate is whether we want to invest in something

beyond ourselves.

Author's Note: Right now, there is an Indiegogo where people have raised close to 1 million dollars for the implementation of this solar technology.

MICHAEL NAM LEE

Super-Mega-Awesome-Jumbo Crossword



Across

11. A sailing ship with a fore-and-aft rig. (4,3,5)
 13. A value that represents a point on a continuous number line (4,6)
 14. An area to have a picnic (6,4)
 15. Candle holders with multiple arms
 18. Branch of mathematics that studies sets (3,6)
 21. Communication through letters
 23. Airships
 24. One of the points which divide a statistical sample in four
 26. Scientific inventions

28. A change in gradient

30. Oak container used in fermentation (4,4)
 32. Cosmetics
 33. Full scale preparation for a performance (5,9)
 35. A symbolic meaning or representation
 37. One's natural tendency
 40. A dress shirt (6,4)
 42. To make impervious to water
 45. Warn in advance
 46. Inflammation of the brain

Down

1. Music: moderate tempo
 2. Cut down
 3. Yearly
 4. Sheep meat

5. USA Flag (5,3,7)

6. Set of vertices and edges
 7. Individually distinct, rather than continuous
 8. Stern, uncompromising
 9. Becoming larger in width
 10. The number of digits used to represent numbers
 16. More dire
 17. True or false value
 19. Slender swords
 20. Proverbial punch to the mouth (7,8)
 22. Part of saddle for feet
 23. Even distribution of weight
 25. Relating to units
 27. Programs in response to the Great Depression in the

USA (3,4)

29. Infested with fleas (4,6)
 31. Measure of mass, generally for gemstones
 33. Having no elements in common
 34. Formal written defence
 36. In a straight line
 38. Perpendicular
 39. Numerical reference to an element
 41. Unidentified flying objects
 43. Narrow strip of adhesive material
 44. Disrepair, decay

OSWYN BRENT

ENTERTAINMENT

Puzzles!

Last Crossword:

C	H	A	N	C	E		R	U	C	K	U	S
O		N		E		A		N		L		H
R	E	V	O	L	V	E		P	I	A	N	O
N		I		E		O		E		V		V
E	L	L	I	S		L	I	G	N	I	T	E
T				T		I				E		L
	A	B	R	A	C	A	D	A	B	R	A	
S		O				N		L				R
M	A	M	M	O	T	H		P	A	S	T	A
I		B		C		A		H		W		T
T	O	A	S	T		R	I	O	T	A	C	T
H		R		A		P		R		R		L
Y	O	D	E	L	S		A	N	O	M	I	E



ENTERTAINMENT

Overheard

An upside-down exclamation

Guy #1: (Pointing at upside down exclamation mark on monitor) Woah! How did you get that upside-down exclamation mark?!

Guy #2: Uhh, it's between the U and O on your keyboard.

A good enough reason

Guy #1: (Pulling out a cigarette): Hey, want a smoke?

Guy #2: Nah I'm quitting, apparently they're bad for you.

A deafening silence

Girl: I can never hear my phone when it's on silent

Should have studied more set theory...

Guy #1: So does he live in Brisbane now?

Guy #2: Nah, he's living at Queensland.

Why did the chicken cross the road?

Guy #1: Why did the chicken cross the road?

Guy #2: Why?

Guy #1: It didn't. Why did the dog cross the road?

Guy #2: It didn't?

Guy #1: Nope, because it saw the chicken crossing the road.

Guy #2: ...

Ever heard something that sounded slightly strange, wheher in context or not? Send it over to

beta.overheard@cse.unsw.edu.au, where weird is normal!

CSESoc BETA TEAM

CSE EVENTS AND SOCIETIES

Upcoming Events

CSESoc Weekly Barbecue

Every Monday during semester 12:30-1:30pm

Physics Lawn

Free free free!!!

Citibank Tech Talk

Monday 26 May 2-3pm

K17 Seminar Room

Citibank will be holding a tech talk. Their technology team will be giving information on algorithms, markets making, high frequency trading and darkpools.

If you are curious about a technology career within an investment bank, join us at the information session to find out more! Free cake and drinks will be served.

Citibank is recruiting! For details about their internship go to this link: <http://www.goo.gl/iljKSf>

Trivia Night

Friday 30 May 6pm

K17 Seminar Room

The time has come... The tremendously trying time that tests the collective conscience coursing through 8 trivia consumed brains.

If you feel that your mind is beautiful (which it is) and that some of your friends' minds are also beautiful (not as much as your's though) then it is not only in your interests but YOUR DUTY to make sure your fellow CSESocians know how beautiful your mind is.

Join us for a super cool night of questions, challenges, BO-

NUS ROUNDS and a scavenger hunt. There'll be a couple of snacks provided and drinks (normal and alcoholic) and the obligatory KFC. ALL FREE FREE FREE.

Tables are now full - but if you're still keen as bean to come then shoot csesoc.social.head@cse.unsw.edu.au an email and we'll do EVERYTHING HUMANLY POSSIBLE to make it happen, we don't want to exclude anyone!

Google Laser Tag

Monday 2 June 11-3pm

Physics Lawn

CSESoc is holding an outdoor Laser Tag event Monday Week 13 on the Physics Lawn - the same time as Awesome BBQ. The event is sponsored by Google in partnership with Battlefun.com. We will be giving out Google schwag for everyone that participates. This is a great way to end semester with a bang!

Awesome BBQ

Day Date Time

Location

This is a minor remindor that next week is going to peak on your BEST WEEK at uni scale. Why, will it fly so high? Awesome BBQ is at the top of the queue because it will provide you with something cool to do. Anyway keeping up that rhyming was too hard, so come to Awesome BBQ for lots of crazy free food! It's so much more than your average BBQ. <spoiler> Steaks, Bacon, Eggs AND MORE </spoiler>.

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