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OLD VS NEW ISSUE



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am writing this editorial after I have I failed to connect to the Internet using my cellular network. The other day I had trouble with the GPS on my phone because it could not connect to download the appropriate maps to get me to where I wanted to go. As we are becoming more dependent on the Internet to run (or is that ruin?) our daily lives, it is has become, just like water and electricity, a basic commodity. A must have. Our

company, just like many others, would not survive if it was not for the Net. There is a big responsibility on the Government and the telecommunication companies, especially Telkom and the cellular networks, to keep us connected as best as possible. Not just because we want to Twitter or Facebook, but because the Internet is directly tied to our country's future wellbeing and prosperity.

Well, with the serious stuff done with, I want to welcome onboard the girls over at zombiekitty.co.za who are contributing to our gaming section. Zombie Kitty is one of SA's premier gaming blogs and also a runner up in this year's SA Blog Awards. We liked their blog so much that we just had to get them in the mag. Have a good read.

### Mike Joubert <michael@techsmart.co.za>

In my hands is the amazing Canon G10 - check it out on p19.

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# THE TEAM

# Editor

Mike Joubert > 083-290-2889 michael@techsmart.co.za

# **Executive Editor**

Suzanne Grobler > 083-742-6370 suzanne@smartpublishing.co.za

# **Business Manager**

George Grobler > 083-460-0402 george@smartpublishing.co.za Advertising

Suzanne Grobler > 083-742-6370 suzanne@smartpublishing.co.za

Anelda Strauss > 083-748-3413 anelda@smartpublishing.co.za Designer & Layout Brett Wilson

Contributors Andrew Gould [AG], Mike Joubert [MJ], Thomas McKinnon [TM], Linda Pretorius [LP], Zombie Kitty [ZK]

**Accounts & Subscriptions** Ronel Keet > 012-362-2732 **Online Editor** 

Thomas McKinnoi thomas@techsmart.co.za



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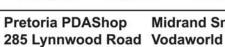
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Last month we asked you what technology you can't live without. You did not disappoint with your answers.

# Letter of the Month

Hi TechSmart,

For me the technology I can't live without would be my cellphone, it's always there whenever I need it. I make calls to my family, friends, and sometimes, for business. And when I am in that boring lecture, it does not disappoint at all. It keeps me entertained with games I always download and, of course, with MXit. My phone also serves as a music player which comes in handy when going on that long trip home.

My phone is like food, without it I will have no energy and eventually fade out. My cellphone is my lifesaver; I call it Steve's best friend. And thank you for keeping us tech smart, TechSmart!!

Steve Mathevula



Hi Steve. Thanks for telling us about your best friend. You are the lucky winner of a exmark X6675 wireless 4-in-1 with a 5-year quarantee sponsored by Lexmark.

### Hi Mike,

Well for me firstly its definitely my HP Ipag 614c. It does everything I need to do and more, phone/PDA/GPS the works .. and I have HandyMap AI installed on the phone and it works magnificently.

Next would be my work laptop and then the Internet, definitely www.google.com is my life and www.wikipedia.com.

Next would be www.fring.com - for my gtalk etc. for my mobile ... keeps me in

OS - Windows at work and Linux at home. My Nintendo Wii and my Sony PlayStation 3 and 47" LCD keeps me entertained.

Ahmed Varachia

# Hi TechSmart,

I would definitely not be able to do without my pair of Asics Gel-Stratus running shoes. I hope the technology inside, such as the Gel Cushioning System, and SpEVA midsole, will keep me going during my first Comrades this year. Thanks for the mag!

# LEXMARK.

# **Fast Fact**

LCD (liquid crystal display) is a type of display technology that has a better resolution and viewing angles than **LED** (light emitting diode) displays.



Tell us which technology in your home you can't live without and why... (DSTv PVR; HDTV; wireless Internet; coffee machine; etc.)

The Letter of the Month wins this incredible Lexmark X6675 wireless 4-in-1 with a 5-year guarantee. (Also available from IT retailers.)

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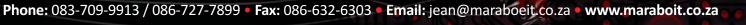
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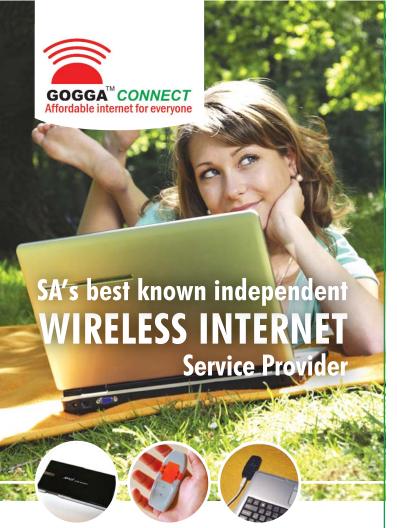
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# What is an HTPC:

A Home Theatre PC (HTPC) or media PC is a convergence device that combines the functions of a personal computer and a digital video recorder. It is connected to a television or a television-sized computer display and is often used as a digital photo, music, video player, receiver and digital video recorder







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CELEB Chris Chameleon



What do you think of Radiohead's "pay as much as you want for our album" method of distribution? It relies heavily on the morality of their punters, which is where it is ultimately all heading. Digital downloads and the free acquisition of music is a reality and can't be fought. The only way is to go with the flow and take it from there. It is easier to take that approach if you've already made gazillions of pounds the world over and will be coining it through the legitimised royalty revenues through radio, television and possibly soundtracks. It's easier to be benevolent when you're rich.

How do you feel about people illegally copying your music?

It serves a good purpose, in the sense that it allows people access to your music, which otherwise they might not have had access to, and so opens up a new level of distribution and promotion. But yeah, it costs. It costs at least R100 000 to make a decent South African album. That's a lot of money to recoup, so one needs to sell some copies. On the other hand, I kind of enjoy the way it has rewritten the game plan. Before it became this easy to copy music, the distribution of wealth was rather capitalistically uneven, with the fat cats and big bands rolling in it and the rest struggling for a spot in the sun. Nowadays musicians need to work a whole lot harder, especially touring live, in order to earn their living, so, it has levelled the playing field and that is good. Ultimately, what decent, honest, nice people do is to give something back when they've been given something.

Having said that, how much pirated music do you own? Well, sometimes I see a CD at a friend's house and if I'm interested, I put it on my iPod. If it works for me I try to go out and buy it. But I'd be hypocritical if I said I always do it. Then again, I seldomly listen to an album more than three times and very seldom more than five times. I'm not a huge fan of music... it reminds me of work.

Let's face it, we are all getting older. How much serious partying do you still do since your Boo! days?

Less than I'd like to! It has more to do with scheduling than inclination. Since Boo! I've been performing an average of 180 gigs in 5 countries per year. You do the math... there's not much room for partying.

Best video game ever? Donkey Kong.

Does your web presence help with international exposure or not really?

It adds about 10% to the mix.

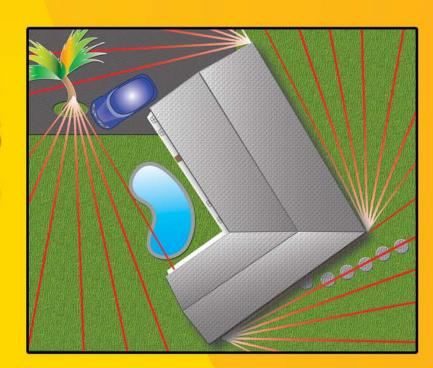
With Klassieke Chameleon out, who do you rate as your favourite classical composer?
Tchaikovsky and Rachmaninoff.

techsmart.co.za | May 09

# WIRELESS J. J.

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**TECH NEWS** 

Titbits

Titbits

Clearing your head

That fuzzy feeling after pulling a few all-nighters is all in your head. Really. Scientists say in an

April issue of the journal Science,

up the neural connections in

that large amounts of proteins clog

sleep-deprived brains. Proteins at

the connection between neurons

some decent shut-eye tonight.

Who would have thought: an eerie green glow that has

baffled sailors for ages is almost like

a neon sea-based billboard selling

sex - for fireworms. According to a

paper published in last months issue

Light my fire

allow snappy neural communication. Looking at microscope

that the longer the brain is kept awake, the more protein

researchers think that sleep allows the brain to prepare for

away unnecessary protein that built up during the past day. Similar chemical changes were also seen in rats' brains during an earlier study, which suggests that sleep allows important

maintenance across a diverse range of animals. So if you

effective neural communication of the coming day, by clearing

don't want to feel like a zombie tomorrow, we suggest you get

builds up at the connections. Significantly less protein

build-up was seen in brains of well-rested flies. The

images of sleep-deprived brains of fruit flies, scientists found

**SCINEWS** 

9

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# **SA** gets own Twitter



All the signs are there that South Africa is heading towards a major Internet revolution. There are South African alternatives popping up for a lot of the international Web 2.0 services out there. Think Muti vs Reddit, Zoopy vs YouTube and

Afrigator vs Technorati. The latest is GatorPeeps, a micro-blogging platform that does what Twitter does, but on a more local level. As with Twitter you are restricted to 140 characters, but with GatorPeeps you can also join certain communities. Sign up at **www.gatorpeeps.com**. Also check out SA photography magazine Pix's new Flickr alternative at http://pixmag.ning.com.

# Nokia Music Store now in SA



**D** 100 for a full length album or R10 Reper track. That is the rather reasonable cost of music at the new online Nokia Music Store. South Africans can now browse over to music.nokia.co.za to choose from over five million tracks. As the 16th country worldwide in which the Music

Store has been launched, the site is not only populated by all the well known international artists, but also by a very decent amount of SA talent as well. We've used the site and it works well, it's just a shame that you need to install Nokia Music on your PC for you to use it, plus all music contains restrictive DRM. You can also purchase music directly from certain Nokia

# Space Needs a Spring Clean



echSmart has been keeping track of developments happening just above our heads, well a few miles above our heads, that is. Recently we reported on all the space junk that has been orbiting the earth and is starting to threaten satellites, the International Space Station and astronauts. Over

300 scientists at the European Space Agency have now met to discuss the problem.

According to the group it will take greater communication and collaboration from similar agencies across the world to sort out the situation.

The US Strategic Command, which monitors space debris, keeps track of 13 943 objects 10 centimeters or larger orbiting the earth. Other agencies world-wide do a similar job. but according to the Europeans, there are very few volunteers to help clean up the mess.

http://www.technewsworld.com/story/66706.html

# Online news round-up

Tf you head over to www.techsmart.co.za this month you Imight come across certain (major) changes to the site. Let us know what you think of the redesign. Feedback from our community is massively important, so send all your comments to online editor thomas@techsmart.co.za. Our Top 3 most read articles for the past month were:

- 1. Creative Sound Blaster X-Fi 5.1
- 2. How to: Make a PC Chassis Braai

3. How to: Make a Multi-touch Screen Also, keep on following our posting

of interesting tech news at http://techsmart.tumblr.com/.

techsmart.co.za | May 09



SU GDP of the journal Invertebrate Biology, female marine fireworms secrete a slimy glow-in-the-dark substance into the water to attract that is male fireworms during the summer mating season. A day or two before each quarter moon phase - for about a half an hour at a time - the females spread the message that fertile pledged sex cells are about to be released into the water. Male fireworms are lured to the area and then also release their sex cells into the water, resulting in fertilisation. The scientists ç suspect that a specific protein in the slimy secretion may be responsible for the light flashes. If the molecular mechanism behind the reaction can be deciphered the protein may prove very useful as a biomarker in a range of biomedical and bioengineering applications. and

3%. Percentage

今

The whole tooth

Tt was a difficult problem to crack, **⊥** but scientists can at last explain why our teeth (usually) don't shatter after a lifetime of biting and chewing. According to a study published in a recent issue of the Proceedings of the National Academy of Sciences, the structure of enamel seems to be the answer.

Although human tooth enamel is quite brittle, a tree-like network of tiny enamel defects called tufts take the strain. Cracks developing from the inside of enamel are prevented from reaching the outer surface of the tooth because of the "basket weave" microstructure of enamel and the network of tufts. These features ensure that stress is distributed over many small cracks, which reduces the chances of a crack growing outward to the surface of the tooth. Should a crack, however, make it past these control points, a naturally occurring filling immediately seals the crack, making it really hard to break apart again. [LP]

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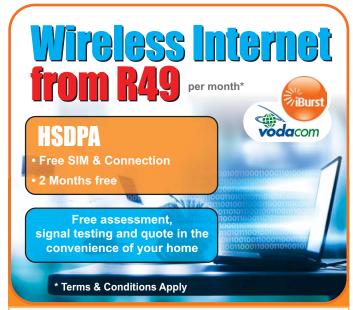
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# Power to the People

The Internet is putting the power to choose, and create, back in the hands of the public. Andrew Gould looks at how the old is making way for the new.

**T**n the not-so-distant past the producers of products and Learning services had 100% of the control as to what was delivered and by which channels, to the buying public. But never before have customers and users of technology had so much power to influence what they buy, read and watch than now, thanks to the Internet. We have become the decision makers, giving guidance to the producers and telling them what we want.

# The public making the decisions

Examples of the voice of the public influencing producers can be seen everywhere. Bloggers and forum users get to have their own slice of the mass media pie. Anyone with a cellphone camera gets to present their video creation through online video sharing. This has allowed for unconventionally creative ideas to be viewed millions of times within an inconceivably short period of time, and also collaborated upon in ways previously unheard of.

It is often true that what gets a lot of hits could just be a pointless, but hilarious, cat doing a silly dance, but online sharing goes much further than that. Not only is there room for this dancing cat, but also for large (and sometimes even disruptive) innovation that is generated by passionate and experienced users rather than large companies and their R&D departments (think The Pirate Bay and peer to peer music, video and software sharing). The consumers have become producers, in a sense.

# What exactly is this for?

Increasingly inventors of new technologies don't exactly know what the killer application of their innovations will be. When cellphone manufacturers invented the short message service, or SMS, they had no idea what its exact use would be. Only when it fell into the hands of large number of teenagers did the invention find its purpose. This is an entirely new model for innovation, where value is often added cumulatively. Even social networking sites created a framework where users' own needs and innovations dictate the ultimate use and direction of the technology.

### New ways of spreading ideas

Researchers are using new communication methods, such as video sharing, as a tool to spread their ideas. This is leading to innovations not coming into life from a single moment of genius or epiphany, but rather through a cumulative process of collaboration. One researcher finds some creative way of using a Wilmote controller for making an interactive whiteboard, and within days millions of people have not only seen his work, but also used his ideas to fuel their own innovative projects.

New forms of copyright are adding to this collaboration. The Creative Commons licenses offer an alternative to the strict copyright of old, allowing others, for example, to use cc licenced photographs or music in their own projects. Go to http://za.creativecommons.org/ for more info.

### The Old still there

Luckily the new hasn't wiped out the old. People still go to the movies, buy magazines and listen to CDs. Radio and newspapers have not faded away, but are evolving with changes in technology, although a number of newspapers and magazines are struggling. All these new technologies and media have simply expanded the scope for creative collaboration. Their use has given consumers and users a richer and greater choice, as well as a voice when they want

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# The New Brain

Just how far are we from recreating the human brain? Mike Joubert checks it out.

rom the Jewish legend of the Golem - a mythical monster reated from clay, and the little boy sculpted from wood called Pinocchio; through to the monster constructed by Dr Frankenstein and given life by the power of electricity, our literary creations seem to follow our technological advances. Now movies like A.I., The Matrix, iRobot seem to suggest that machines can attain a level of human like intelligence. Two big scientific attempts the past number of years show that recreating the human brain might just be achievable.

## The Blue Brain

The first kicked off in 2005 and is called the Blue Brain project. It is a joint collaboration between scientists from the Ecole Polytechnique Federale de Lausanne (EPFL) in Switzerland and computer group IBM. What they set out to do is reverse engineer the brain and recreate a biologically accurate cerebral cortex using a super computer. They are coming pretty close. Each microchip used in the computer acts just like a brain neuron would, and is arranged similarly to pathways found in the brain. The first phase of the project was completed in just under two years, with them managing to simulate a neocortical column, which can be seen as the basic repeating processing unit the larger cerebral cortex is made from. Last month it was reported that the Blue Brain is being integrated into a virtual animal so that the column can be observed while the animal interacts with a virtual environment. Astoundingly the Blue Brain already shows signs of remembering and learning.



# Brain on a chip?

While the Blue Brain Project utilises the massive processing power of IBM's Blue Eye supercomputer to simulate a brain, another group have actually built a silicon chip that works like a brain. The Fast Analog Computing with Emergent Transient States project, or FACETS, has come up with a computer chip that recreates the neurons and synapses found in the brain using circuits of capacitors and transistors. The chip contains far less neurons than the human brain (200 000 vs 100 billion), but it can be upscaled. FACETS do point out that the chip is not a brain but rather an aim to harness the parallel computing powers of the brain. The next step in the project is to improve the chip up to a level where it contains a billion neurons.

While the jury is still out on whether these projects can lead to artificial intelligence or even humanlike consciousness, it does appear that our tales of objects becoming humanlike, are becoming increasingly real.

# HP Mini 1000 Vivienne Tam Netbook

# Small, Clever and Stylish

With their Mini 1000 Vivienne Tam netbook HP decided to add a smack of style to their netbook range. And we say, why not? If being small and clever is not enough why not also go for stylish?

The 1098ei was designed, at least on the outside, by American fashion designer Vivienne Tam. The whole netbook is doused in a passionate red with a floral pattern on the top cover. It is bound to get you stares while sitting outside the café sipping on a skinny latte. More so if you're

The Mini 1098ei we had, has a number of nice features. Firstly the keyboard is pretty close to being full size, which makes it a pleaseure to work on. The trackpad is big with the left and right click buttons usually found on the bottom of the trackpad now on the sides. You have two USB slots, a webcam, plus a handy SD card reader. Regarding performance, it performed as well as can be expected. Based, as most netbooks, on the Intel Atom processor (1.60 GHz), it includes a 60GB hard disk drive and a good 1024MB wallop of RAM. For some, the fact that it comes preinstalled with Windows XP Home, with service pack 3 updated, will be like a return of a good old friend, especially if you are using Vista on your other PC. Although Wi-Fi and Bluetooth is included, we were disappointed that it (or should we call this she?) does not include imbedded 3G as seen on the Acer One netbook and the new LGs.

Overall we like the HP Mini 1098ei. For its exclusive design HP is putting a bit of a premium on the price though, but then again style never came cheap - R7499 incl VAT on www.hpshop.co.za.



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DFI LanParty UT X58-T3eH8 Motherboard

PC HARDWARE

# Fragelicous: Grrrrr

Intel describes their new Core i7 processor as "the best desktop processors on the planet", and we are surely not going to disagree with this.

There has been many x58 motherboards released for the i7, but the one that has been grabbing the headlines is DFI's monster - the LanParty UT X58-T3eH8.

To say there are a lot of features on the motherboard is an understatement. The X58-T3eH8 supports both 3-Way SLI and ATI CrossFire X configurations, with the ability to mount three graphic cards simultaneously. You can only imagine what that can do to your 3D game rendering capabilities.

Cooling is helped along by nickel plated sintering heat pipes designed to help thermal conductivity, plus it features an external heat-pipe bracket that mounts the sink externally.

You'll also find six triple-channel memory DIMM slots, dual gigabit LAN connections, as well as eight-phase digital CPU voltage regulators.

If overclocking is your thing, and you have to be pretty damn serious about it with this unit, then the UT X58-T3eH8 is the motherboard for you.

Available from PC Pro Shop on 012-348-4000 for R6100.

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and Hotcard BizCard

Finder The software comes in

especially handy when you need to do

after-scanning jobs like removing blank pages, cropping and de-skewing images.

The Plustek SmartOffice will have you scanning at 600 dpi in black and white, grayscale or colour. We found this to be a really versatile device as the 50 sheer feeder accepts anything from business cards, your drivers license to full A4 pages. Available from imageTEK on 011-608-1964.

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PC HARDWARE

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Konica Minolta PagePro 4650EN Laser Printer

All Hail the Speed King

We liked the 4650EN's large paper tray, it holds about a

ream's worth of paper, so constant trips to refill the printer is

there is no duplexing on the machine (it's an optional extra),

and special features are kept to a minimum. Having said that,

documents directly off flash disk, but you would have to buy

optional hard disk drive. Available from Konica Minolta on for

an extra CF card to get this working. Some other features,

such as secure printing, are only unlocked if you buy an

tray that can store an extra 150 sheets of paper or special

kept to a minimum. There is a second tray just above the first

The printer's robustness hides little in the way of features -

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On the vehicle tracking side, the AV-580 system incorporates a Tracetac device. This point-to-point transmitter works independently from the AV-580 device to transmit its exact location to a control centre. Once you report your vehicle stolen, response and recovery teams are activated.

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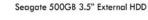
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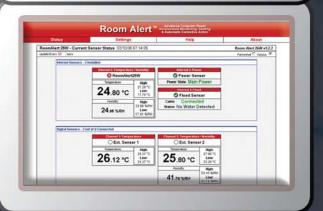


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RCA Jet Stream Wireless MP3 Player

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few final bicep curls, you can vouch for how utterly irritating

little less frustrating since it is completely wireless.

frankly it's just too small.

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make it even more active friendly. Onboard you'll find a

Index calculator. It is splash proof, plus it contains an FM radio, and although you can view photos on the colour display,

wires are. RCA's Jet Stream MP3 player makes your workout a

This 1GB MP3 player includes some nice added extras to

stopwatch and pedometer, a calorie counter, and a Body Mass

To make the earphones not drop out while exercising they

come with removable ear clips and are guite comfortable. You

also get an arm and wrist strap so you don't have to struggle

carrying the unit around. This MP3 player is not the latest top

Available from Computer Corporation on 08616-08616 for

of the line stuff, but still a very good choice for an active

Corporation on 08616-08616 for **R200**.

Number Cruncher

Tf you need sound for

Lyour MP3 player, but

budget to fork out R4000 for a multimedia dock,

don't quite have the

# Canon PowerShot G10

# The Best Compact Available?

Robust, powerful yet compact. An apt description of **Canon's PowerShot** G10, the perfect camera to get if you don't want to lug around a big DSLR.

anon has added a unumber of sweet

improvements to its predecessor,

the G9, our favourite being the widening of the lens from a restrictive 35 mm to the new 28 mm, even though the G10 is now a 5x zoom instead of 6x. You'll find the 28 mm very helpful in landscape photography and the bit of zoom you are sacrificing is well worth it. The 3" LCD screen benefits from the doubling of pixels on it (to 460 000), making it a dream to work on, especially when reviewing photos. The battery life is also improved, and you now have servo-av plus, an exposure control dial to your service.

Where the G10 can be faulted, is the lack of HD video as seen on the PowerShot SX1 and there is also a lot of graininess on ISO above 200.

Although the G10 is a spectacular compact camera, if not the best, you should still not expect the same quality pictures as DSLRs with their bigger image sensors.

The RRP on the G10 is a steep R7599 (incl VAT) and is available from good camera shops.

HD Video on DSLRs

# Enter the New HD Contenders

With the "more megapixels" fight all but over, the latest punch up concerning digital cameras is about HD video shooting capabilities. The two Goliaths of the

have both entered the ring, this time with their latest offerings featuring HD video.

anon's EOS 500D and Nikon's →D5000 are aimed above entry-level to consumers who have spent some time with DSLRs and are looking for

an upgrade. Canon seemed to have pipped Nikon to the post with their HD video capabilities, with the 500D being able to record both 720p (30fps) and 1080p (20fps), while the Nikon can only do 720p (24fps). Nikon

> sleeve in the form of their 2.7" Vari-Angle pull out LCD, which makes shooting from above your head or down on the ground a much easier task. The Canon EOS 500D with 18-55 IS

VR lens is expected to retail at about R10 900 when it hits the market beginning or mid May.

camera world, Canon and Nikon,

though does seem to have an ace up its

Lens retails at R12 299, while the Nikon D5000 plus 18-55mm

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500GB

LG KC550

# Feeling Snap-Happy

\* · 0 -- #\*



G is looking to Lembed itself firmly in the camera phone market, with the

KC550 probably their first attempt at building a phone that aims primarily at the user who wants a great camera phone, without all the other stuff that push up the price.

Looks-wise the KC550 is a rather demure creature. Sure, it doesn't make a huge fashion statement, but it's hardly an eyesore, in fact, we nature works very well.

The KC550 features a music player, although you're stuck with the headphones LG gives you, as there is no 3.5 mm jack for third-party headphones. It also includes an accelerometer, used for six builtin games called M-Toy.

Of all the features of the KC550, the camera is, by far, the star. It has a Schneider-Kreuznach lens, autofocus, image stabiliser and a macro feature for close-ups.

Although it lacks a Xenon flash, it does have a powerful LED illuminator. The video recording capabilities of the camera are impressive too, with a DVD-like resolution of 720 x 480 pixels, at 30 fps. All this makes it one of the cheapest 5 megapixel camera phones on the market and certainly worth the investment.

Sony Ericsson Cyber-shot C905

# Go on, Take a Picture

With the cellphone world going touch-screen crazy, some will find Sony Ericsson's C905 with its just plain slide out keypad refreshingly normal. Technically the

C905 makes all the right noises. It includes A-GPS (with Google Maps), Wi-Fi and HSDPA, plus it auto rotates the screen's orientation from portrait to landscape.

Key to the C905 is the eight megapixel camera, with a lot of attention being paid to making the camera feel at home on its cellphone body. The C905 operates just like a regular compact camera would, with even features like face detection onboard. Your pics can be geotagged to show your exact location



when you took it, plus the Xenon flash is a big bonus. Generally we were quite pleased with the quality as well as detail on the pictures. Unfortunately the glare from white objects caused a headache and it spoiled a lot of our outdoor pictures. Regular compacts have managed to bring this under control, so in that regard you're still better off with a regular camera. As a phone/ camera hybrid though, the Sony Ericsson C905 is a very good choice.

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Android for Mobiles

# Walks the walk and ...

In the next few months you'll start to hear a lot about Android, since HTC will launch the first phones in SA that work



on the Android platform. What is Android and why is it important?

Android is an operating system for Cellphones, just like the Windows Mobile platform, or the Symbian platform you'll find on Nokia phones. So why the big fuss? Well two reasons. Firstly, it was developed by Google, and we all know what Google did to the web.

Secondly, it is open source, meaning that the code used to create Android is open for anyone to use. This allows developers to create applications for Android or incorporate new technologies as soon as it is introduced. So the development of Android is not restricted to just a few engineers in certain companies, but a whole community.

Android is also supported by the Open Handset Alliance, a consortium of companies that include big names such as Sony Ericsson, Samsung, LG, HTC and Intel. These handset manufacturers are able to create proprietary interfaces or tools for their phones, and have released or are scheduled to release phones with Android on it.

Consumers will be able to make use of the Google tech supported by Android (such as Google Maps, Calendar etc), as well as the wide array of applications that is available for free, or to buy on Android Market online.

# So what of the UI?

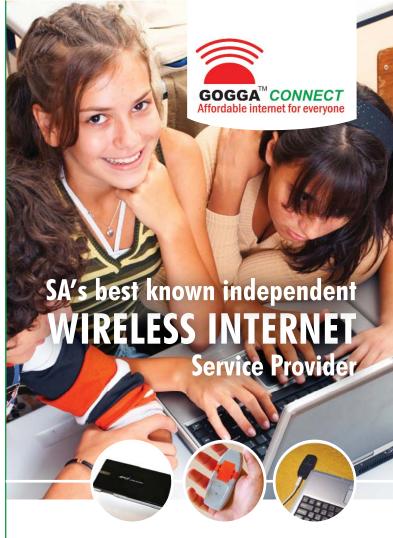
We installed Android on a Forerunner Neo test phone and can report back on its user interface. Android bears a number of similarities to the iPhone OS. Users can flick the screen to scroll through items and its browser is built on Webkit. Android does not however offer multi-touch so all that pinching and expanding iPhone users so love, is not there. But Android does support "long press" which allows users to hold their finger on a menu or item to bring up additional functions. It also supports cut and paste and running multiple background applications. The UI also features a dedicated search button in true Google style. The search button can be used for searches on the device and the web, which is useful.

The best bit about Android is its integration of Google apps, such as Gmail, Google Talk, Google Maps and YouTube. If you're already a big fan of Google apps all you have to do is enter your Google account username and password and you can access your mail, calendar, contacts etc. directly from the cloud. What it doesn't support is multiple Google accounts though, which is a real irritation if you have more than one Gmail account.

# The Bottom Line

So, while Android is still in its infancy the depths of its potential have yet to be comprehended. With the imminent launch of the HTC Android device in the country, you may just be kicking yourself if you recently committed yourself to an iPhone contract.

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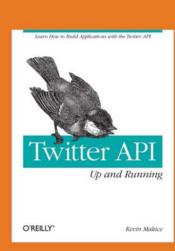
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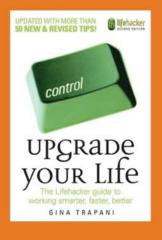
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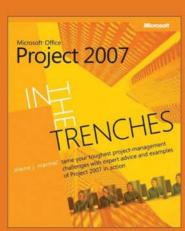
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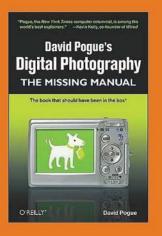
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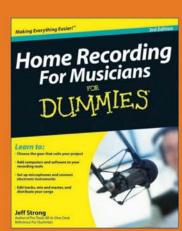












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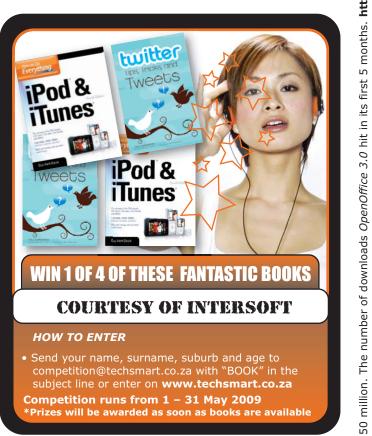
# The Sound of Twitter

Oprah, Hugh Jackman, Britney, everyone these days is tweeting in 140 characters or less (Ashton Kutcher is leading the pack with 1,35 million followers).

Getting started with Twitter is easy as pie (point your browser to twitter.com and sign up), but as you get into it you might want to start doing more. Twitter Tips, Tricks and Tweets will help you get the tweeting like a pro. The book contains topics such as setting up your Twitter account, searching for Tweets, learning how to add Twitter to your blog and more, all in an easy-to-use manner. (R305)

Even though Twitter themselves aren't quite sure how they will make money from their service, who's to say that you might not? Learning the Twitter's API is the first step to get going. There is gold in them there hills, so if you want to start building web applications for Twitter and get them implemented, *Twitter API: Up and Running* is the book for you. (R480) These titles and more are available from Intersoft on 011-325-2643 or www.intersoft.co.za.





Advertorial Distance Education

# Brainline Distance School on Computer

In this day and age, where demands placed on schooling by industry and life itself are challenging to say the least, an alternative form of schooling, based on the latest technology, offers a refreshing new choice to the learner of the digital age.

# **Brainline: Who are they?**

The concept of Brainline as an educational system on computer, with assessment delivery via the Internet, started in 1987. From 1994 – 1996 it developed into an institution providing distance education on computer, at school level, with examinations in all grades. In 1999 the first matriculants wrote the SA grade 12 examination and Brainline was also accepted as a centre for Cambridge International Examinations.

Brainline is of the opinion that the education of learners is an exciting journey that includes the entire family, and most importantly, the learning environment should be made what it was supposed to have been all along: supportive, calm, exciting and adaptable to the needs of the learner.

Taking control of one's education places the responsibility in the hands of both parents and learners alike. High quality, standardised, bite-sized learning units – complete with assessment projects and memoranda attached – enables learners and their parents, guardians or tutors, to meet the minimum requirements of the national curriculum as set by the National Department of Education of South Africa.

# How does Brainline work?

Brainline is a complete school curriculum on compact disc, a unique schooling system with the personal computer as its delivery vehicle. But they are much more than that: they are a learning community – a large group of people learning together, discussing concerns in the learning environment, making friends and solving problems. The compact disc contains a full year's content in most of the subjects and learning areas at school level, from grade 1 to 12, in both English and Afrikaans.

# **Study Material**

All the study material required by the learner to complete his/her learning for the academic year, is provided on the compact disc. If it is not available on the CD, Brainline will provide the books (grade 10-12) and an accompanying work schedule. Should you wish to peruse the lesson material, you are most welcome to download demonstration lessons from the Brainline website. Alternatively, you can order a demonstration CD, which will provide you with an example of a course material CD. Simply SMS the words "Demo CD", accompanied by your complete postal details, to the number 082-882-4446.

# Accreditation

All certificates for school leavers are quality controlled by Umalusi (Council for Quality Assurance in General and Further Education and Training) as set out in **www.umalusi.org.za**.

Brainline meets the minimum requirements set by Umalusi and has been provisionally accredited, with reference number SCH00223PA. Brainline has been nominated as an "Accreditation Candidate".

# For more information

Please visit their website at **www.brainline.com** or phone the Customer Care Centre on 012-543-5000. Feel free to email them at info@brainline.com.



Are you not of school going age and interested in completing your matriculation certificate?

Our online learning system is very adaptable, and is not only suitable for children. Adults can use our compact grade 10 - 12 system, to gain their grade 12 qualification easily.

You can complete grade 10 - 12 in only two years through Brainline.

# Year 1:

Complete your "compact" subjects for Grade 10 You need to complete seven subjects. Write the exams in June. Complete your "compact" subjects for Grade 11. You need to complete seven subjects. Write the exams in November.

# Year 2:

Enrol for Grade 12. Complete the assessment through www.brainonline.com. Write you final exam in October/November.

We have a range of subjects to choose from, with workshops for practical subjects. Our students communicate with teachers via our online learning system - brainONLINE.

Our younger students enjoy social activities hosted by us throughout the year. Our adventure camps are very popular, as well as our other events.

For more information, please visit www.brainline.com



Become part of our learning world!

techsmart.co.za | May 09

# Brett Simpson, managing director of Breadbin Interactive Distribution of your information made easy

We love free stuff, and if it is free software we can get without downloading it from the Internet even the better. The Freedom Toaster kiosks do just that - give you useful free software and content. We talk to Brett Simpson, MD of Breadbin Interactive, the distributors of the Freedom Toasters.

What exactly is a Freedom Toaster?
The Freedom Toaster is a content delivery kiosk that allows users to conveniently choose and burn relevant digital content onto CDs. DVDs and USB flash drives, using an easy touch screen interface. This without incurring the cost of downloading it off the Internet. The Freedom Toaster, originally built to distribute the most popular Linux distributions, has evolved to the point where the technology behind it is used to burn almost anything digital - from electronic textbooks and music to software and beyond.

## How did you come up with the idea?

The project was first conceived when Jason Hudson (previously of the Shuttleworth Foundation and now a director of Breadbin Interactive) realised that while 'open source' represents the future of software, South Africans face significant barriers in terms of its distribution due to the high cost of bandwidth in this country. The fact is that there seems little point in offering freely available alternatives to proprietary software, when they cost too much in bandwidth to distribute or download.

The solution? Software, media, courseware, or any digital content, loaded onto a computer or terminal, which allows end users to bring a disc or flash drive and burn what they want straight onto it. For free!

### So it grew from there?

While today the Freedom Toaster is an independent

commercial undertaking by Breadbin Interactive, the initiative was first developed and prototyped with the support of the Shuttleworth Foundation.

So successful was the undertaking that the Freedom Toaster quickly grew into a highly effective digital content distribution initiative that reaches across South Africa and is being replicated internationally in countries like Ethiopia, Saudi Arabia, Namibia, India and Canada, to name but a few.

## What types of content can be distributed on the machines?

Our focus regarding content is a based on user feedback which is an ongoing process. Our most popular content is still Free and Open Source Software but we have introduced with great feedback Ted Talks (inspirational message from world and thought leaders like Branson, Gore and the Google guys), the full South African school curriculum from grade R to 12, Ebooks, music (local artists) etc...

We are also dealing with SEDA for entrepreneurial content, MINDSET for educational material, LOVE LIFE for life orientation and many more partnerships to add more value to

For more info on the Freedom Toaster or ordering your own go to www.breadbin.co.za.

# How to: Make an Infrared Camera



The only way to see IR light (with its wavelength of 750 nm to about 100 μm), is with an IR camera. Now you could go out and buy one, but you probably can't afford one, and then I'd have nothing to write about. The alternative is to make your own. What

we really want is a camera that is sensitive to Infrared light but not very sensitive to normal light. To achieve this you can take an ordinary webcam and remove the IR filter that prevents IR reaching the CMOS sensor. But you will also need an IR pass filter that allows only IR light in, but not normal light.

### What you need:

A webcam. Some exposed and developed film negative (the black part at the end of a roll of film), the inner bit of a floppy disk or some unexposed, but developed colour slide film.

SUPERB~

**B**Uniwell

086 100 5855



### Doing it:

Very carefully unscrew the screws holding the plastic casing together and take it apart cautiously. Well done, you have just voided the warranty on your webcam, so no going back now. Different webcams are put together differently, but the idea here is to remove the casing holding the lens in place. Once this is done you'll be able to see the CMOS sensor. Whatever

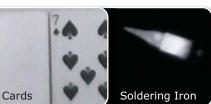
you do, do not touch it.

Now dismantle the lens casing and find the IR filter. If you hold the lens assembly up to the light it will have a slight red tinge to it. The filter may be a separate component, in which case you can simply remove it, or it might, as with mine, be integrated into the lens assembly. You can still remove it, but you will have to break it out. Be careful when doing this, otherwise you will end up sticking a screwdriver or similar pointy object through the lens.

Now all you need is an IR pass filter. It will not be a perfect filter, but for our purpose, it will do. To construct the filter, mount a piece of film or floppy disk so you can put it in front of the lens. I used an old slide holder I dug out of a cupboard.

Now just plug in your camera and, once you have a source to illuminate objects with (such as your TV remote), you can look at the effects with your new IR webcam. As all objects that emit heat also emit IR light, your IR camera will pick up the IR from hot objects, like a soldering

Some types of ink will not show up under IR light, like the red on this playing card. It is the seven of hearts, but under IR light the card appears blank. [AG]



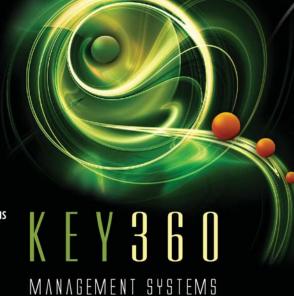
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# INTERNET

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# Seth Rotherham of 2oceansvibe SA blog of the year

Seth Rotherham's blog 2oceansvibe (www. 2oceansvibe.com) strutted away with six awards, including Blog of the Year, at this year's SA Blog Awards. He tells us how he got started and gives us some tips on blogging.



# Cix awards including blog of the year, best original Owriting and most humorous. Did this come as a surprise?

With six nominations, I certainly was hoping to get at least one or two. But six? And the best overall? No – I simply refused to think that far. I lived with professional rugby players for a few years in my early 20's and talking about winning before a match was taboo in our house. "Jinxing" the match and all that, is an absolute no-no!

### When did you start blogging and why?

About seven years ago, before blogs were really blogs. I just made a website to showcase photos of parties that my friends and I had been to the previous weekend. Just for everyone to see. In the days when my buddies had internet access, but no email. Then I started commenting on the pics and writing little stories to fill the spaces. Strangers told me they enjoyed it which was weird – but appealing. They found it funny and urged me to keep writing. I enjoyed writing (and still do) so I

# What inspires you to blog everyday?

Just everything I do and see and think. Like any discussion you would have with a friend in a bar or a braai or a restaurant - exactly the same thing, except I type it for everyone else to see as well. Whatever I'm talking about, I'm writing about.

# Any tips for aspiring SA bloggers?

Stop talking about it and get started. Write a minimum of one article a day - even if it's a pic and a one liner - and it'll get going. If you want to do it and you think you'll love doing it - then do it! Good things will come of it.

that

### What blog creation tool do you use?

My blog creation tool is Wordpress. But my secret weapon is a program called Chris Mills – which is the guv who runs www.imod.co.za (winner of Best Science and Technology Blog) and who's behind all the deep hard-core coding behind the 2oceansvibe Wordpress platform. He does all of my friends' and family's blogs.

# Your personal choice of SA Blog of the Year?

I couldn't choose one out of the other nominees. I'm a regular visitor of http://sarocks.co.za/, http://imod.co.za/, http://watkykjy.co.za/, http://from-the-couch.com/ and http://www.matthewbuckland.com/

# Is the money from blogging any good?

If your website has an image and appeals to a defined market, certainly - you can make it work for you. But placing random ads around the page won't do it. You need to create a brand and a following and the rest will come.

techsmart.co.za | May 09

# May Web Time Wasters

# www.autohotkey.com

↑ utoHotkey is a free, Aopen-source utility for Windows. With it, you can automate almost anything on your PC by sending keystrokes and mouse clicks. You can write a mouse or keyboard macro by hand or use the macro recorder. This might sound quite

difficult, but once you go through the simple tutorial, it's actually a piece of cake.

Virtually any key, button, or combination can become a hotkey. A great feature of Autohotkey allows you to expand abbreviations as you type them. For example, typing "btw" can automatically produce "by the way".

# www.mindmeister.com

Many people have spent their youth learning to study with the aid of mind maps. And now, as with so many things on the Net, mind mapping has gone collaborative.

MindMeister is a powerful tool that can be used for real-time collaboration to allow truly global

brainstorming sessions. Users can create, manage and share mind maps online and access them anytime, from anywhere. In brainstorming mode, fellow MindMeisters from around the world (or just in different rooms) can simultaneously work on the same mind map and see each other's changes as they

screencasts. ScreenToaster is an easy way to rapidly create and share tutorials, demos and training

www.screentoaster.com

Screentoaster is a startup by a group of French web engineers

whose aim is to enable people to

share their know-how in a very

simple way, by making

This free, web-based, screen recorder allows you to capture your screen activity, audio and webcam images in real-time, publish and share your video in blogs and websites.

Unlike other similar sites or software ScreenToaster doesn't require any software download, so you can use it anywhere.

# www.lifedrive.com

Online storage is becoming the thing to do as we move into the "cloud". The idea is that you don't store files on your PC, you store them in cyberspace instead. LiveDrive offers just this service, to both individuals and businesses.

Using LifeDrive you can store files once and access them

wherever you are in the world. It works just like a normal hard drive would. You just move or copy the file to your LifeDrive and the file gets uploaded.

LifeDrive includes some great features, like the ability to see all your files on your cellphone or any other web-enabled

sales@edutain.co.za





# Websites

# New ways to do old things

Written by Lance Terner, a 12-year Internet industry veteran and Chief Executive of Branded Internet - listed as one of SA's Top 50 ICTe Companies 2005/6 + 2006/7.

I recently became a dad again with the addition to the family of the cutest little girl. She's really pretty, but also

really loud, and really demanding. Needless to say, life in our house sure has changed a lot over the last few weeks. One of the biggest changes was we had to be smarter and more efficient about how we did things. I immediately turned to the Internet to get my life more streamlined.

The path to finding smarter, more efficient ways to do things lead me to some fascinating sites. The extensive resources and tools that I found dealt primarily with good-to-know information, inspiring ideas and handy tips for those who are looking to make the routine of life just that little bit easier. What I like a lot about these sites is that a majority of the content and information being provided was created by users just like you and I. I hope you will get as much benefit out of these as I did:

• Real Simple http://www.realsimple.com RealSimple.com, the website for Real Simple magazine, is the go-to site for people who are looking to make life easier. The site provides smart, realistic solutions to everyday challenges.

LifeHacker - http://lifehacker.com

The term Life Hack has technical origins and describes anything that solves an everyday problem in a clever or non-obvious way. LifeHacker is a daily blog that features tips, shortcuts, and downloads that help you get things done with your computer, smarter and more efficiently.

5min Life Videopedia http://www.5min.com 5min Life Videopedia provides a wealth of instructional how-to videos as well as DIY projects. There are about 140 categories, with all videos being professionally produced. Each video is limited to no more than 5 minutes.



LifeTips - http://www.lifetips.com

This site is a user content driven site. There are quite literally hundreds of topics and categories that are covered, with site gurus, answering your guestions and leading discussions on the topic. There is a goldmine of information based on individual experience.

• Home Made Simple -

http://tinyurl.com/p28ep The Home Made Simple website is billed as providing "Simple Solutions for easy living". A site aimed more at the home, here you will find great information on a number of related topics such as organising your home more efficiently.



If you have any questions or queries drop me a mail, lance@brandedinternet.co.za.

Compliment your offering...

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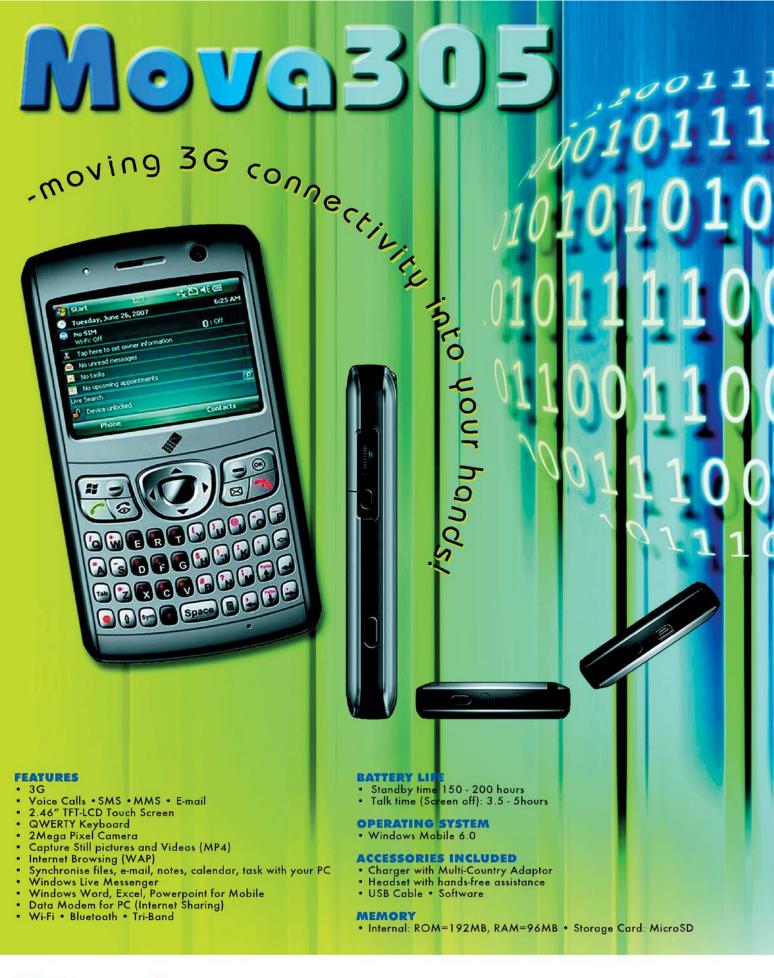
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Now your company can also offer Internet services for your clients, while we provide you with all the tools you need to be a successful Internet Service Provider

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XX ZOMBIE KITT

Tlove a good singing game! In fact anything musical and

**I**physically interactive (besides your thumbs and trigger

fingers) that gets you singing, guitaring, drumming like it's

1985. So when I cracked open the packaging of my new Lips I

was super stoked. (when I say cracked open, I mean wrestled

Shop 21: Wilrogate Shopping Centre, cnr CR Swart & Ontdekkers

# 'THE GAME IS NEVER OVER'! Pre-order games still to be released

# NEW TITLES COMING THIS MONTH:



Based on Universal Pictures' action-thriller Wanted, this game promises to deliver the same fantastic visual style, in-your-face attitude and edge-of-your-seat action as the blockbuster motion picture. The game continues the story of hero Wesley Gibson, picking up the action where the film leaves off and creating an entirely new chapter exploring both Wesley's journey to becoming an unmatched überassassin and the epic fiction of "The Fraternity." Featuring intense third-person action, the Wanted video game will take combat to the next level with iconic moves -- such as "Curving Bullets" and "Assassin Time" -- drawn directly from the film, as well as an nnovative, multi-layered cover mechanic

Available on Xbox @ **R699** – Ps3 @ **R699** & PC @ **R499** 



A God has fallen

The all father has vanished, creating an opening in the pantheon. To fill the void. Demigods from across from the mortal world must wage war against one another in a bid to ascend to true godhood.

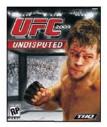
Demigod is a real-time, tactical strategy game that includes extensive role-playing elements. Choose from several Demigods, each poised for battle with their own unique capabilities and awe-inspiring powers. Vanquish other would-be gods as you gain levels, increase in power, unlock the power of mystic artifacts and slowly battle your way closer to joining the Pantheon.

Available on PC @ R349



Operation Flashpoint: Dragon Rising is a tactical military simulation fame designed to realistically represent modern infantry combat. This game will have over 70 real life weapons, all supported by a realistic ballistic system. The game play in Operation Flashpoint is completely open and objectives are assigned as they would be in real life.

Xbox @ R799 - Ps3 @ R799 - & PC @ R399



UFC 2009 Undisputed is an explosive fighting game detailing the action, intensity and attitude of the Ultimate Fighting Championship (UFC). Featuring an authentic and comprehensive UFC atmosphere, including an extensive roster of the best mixed martial arts fighters in the world, players will push the envelope with a powerful new game engine and put their best fighting disciplines to the test in the world famous Octagon.

Available on Xbox 360 and Ps3 Price: TBA

In Sacred 2 – Fallen Angel you assume the role of a character and delve into a thrilling story full of side quests and secrets that you will have to unravel. Breathtaking combat arts and sophisticated spells are waiting to be learnt. A multitude of weapons and items will be available and it is your choice, which of your character's attributes you will enhance with these items in order to create a unique and distinct hero

Xbox 360 @ **R699** – Ps3 @ **R699** – Already available for PC

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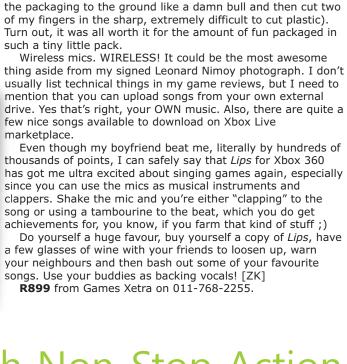
Xbox Arcade @ R2599.00

Xbox 360 - 60qiq @ R3799.00



**PSP** @ R1799.00 - pre owned New @ R2500.00





"addicted"



# Heart Pounding with Non-Stop Action

Time to Get those Lips Moving

such a tiny little pack.

marketplace.



If you're ready to strap up and get high in a cockpit then keep reading because you're in for a treat!

AWX is a flight sim that drops you in the driving seat of the world's most accurately modelled aeronautical marvels as you rage through the air in a beautifully rendered world. It's all for a good reason and the story, which follows the events of the Ghost Recon Advanced Warfighter games, is presented in the single player campaign

via radio communication, on-screen videos and cut scenes. It has all the usual Tom Clancy flair, which is to say that it's rather inconsequential and only really acts as an introduction to missions where you are pitted against swarms of 'Freedom Haters' and proceed to annihilate them with your superior fire power. And I have to tell you, it's a whole lot of fun!

You see, although the game is touted as a flight simulator, it's really more of an arcade-style shooter that looks really, really good and honestly that's what you want from a console game because if you're heavy into 'as real as it gets simulators' you'd have a captain's chair set up in your den with joysticks and air hostesses included.

his is the first print "hello" from the girls at Zombie Kitty. We love gaming, having a good time with good friends and good wine. We plan to stick around a while and share our opinions and

complaints about refresh rate screen calibration ratio's and other technical smart sounding things that men go on about

for ages. We're all about good, (mostly) clean fun, and we hope to share it all, with you.

views on the way gaming is supposed to make you feel. No

few nice songs available to download on Xbox Live

songs. Use your buddies as backing vocals! [ZK]

R899 from Games Xetra on 011-768-2255.

The action is never ending and heart pounding, the gameplay is easy to pick up, the enemies never stop coming and there's multiplayer, what else could a would-be dog fighter ask for? It's the most fun I've seen in the skies since Con Air and I couldn't put down from start to finish. [ZK]

R699 from Games Xetra on 011-768-2255.



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- » 20 MB per mailbox (New!)
- » 15 auto-responders
- » Formmail script
- » PHP
- » 1 Database (MySQL or Postgres)
- » Control panel
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# **Power Hosting**

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- » 30 email redirects
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- » 1 Database (MySQL or Postgres)
- » Control panel
- » Virus scanning
- » Spam filtering (SpamAssassin)
- » Webmail

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- » 75 email redirects » Formmail script
- » PHP
- » SSI
- » 1 Database (MySQL or Postgres)
- » Control panel
- » Virus scanning
- » Spam filtering (SpamAssassin)» Webstats (AWStats or Webalizer)
- » Webmail
- » Custom error documents
- » 25 Group mails
- » Ruby On Rails Support (New!)

# **Ultra Hosting**

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- » 100 email redirects
- » Formmail script
- » PHP
- » SSI
- » FrontPage server extensions
- » 2 Databases (MySQL or Postgres)
- » Control panel
- » Virus scanning
- » Spam filtering (SpamAssassin)
- Webstats (AWStats or Webalizer)
- » Webmail
- » Custom error documents
- » 50 Group mails
- » 2 Sub domains
- » Ruby On Rails Support (New!)

# **Extreme Hosting**

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