ISHARE

Monthly Magazine

I.Share
Enlight IT with Global Vision

K.S.Rangasamy College of Arts & Science (Autonomous). Tiruchengode

Technical Forum
created by students
for students

Inside this issue

- 3D Computer Processor

- Midori

- Innovations

- How CPU made

Lots more. Explore……

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EDITORIAL …

CPU and Operating System are consider to be vital for a system. And this issue covers articles and cover stories relating to them. Inventions let to luxury and day by day IT industry met with various new arrivals in Hardware as well as Software. This Ishare offers recent news relating to the happening. Many more useful and interesting information's are in this edition of I SHARE....

Editorial Board

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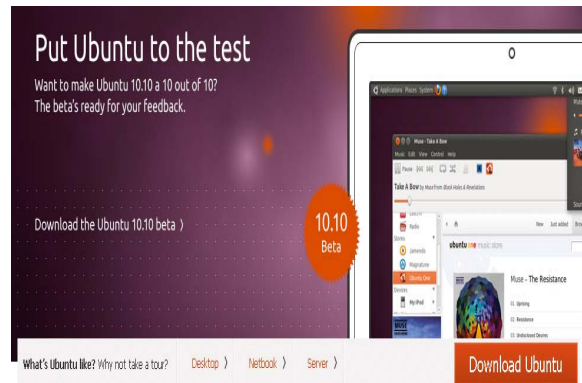## Articles

Ubuntu

Author

Ms.S.Sasikala,Lecturer
Computer Science

This article helps to know about the features of Ubuntu.

Ubuntu 10.10 Beta

Features

Free apps, safe and fast web browsing, a dedicated music store and much more. Ubuntu brings the very best technologies straight to your desktop.

Browse the web

Ubuntu includes Mozilla Firefox – for fast, safe web browsing. You can also choose alternative open-source browsers from the Ubuntu Software Centre.
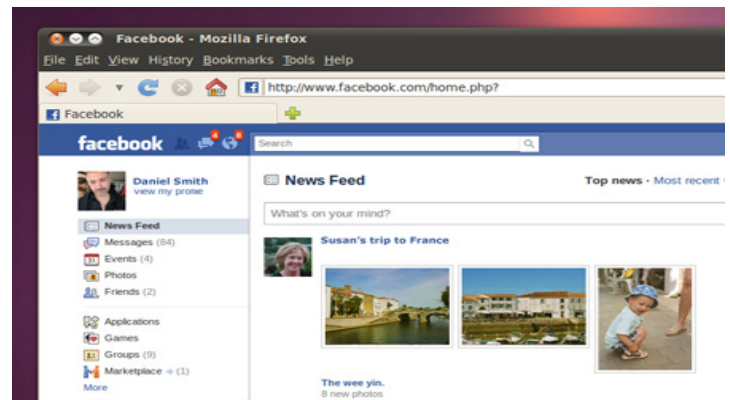
Included software:

Firefox web browser

Supported software:

Flash

Create professional Documents and Presentations

OpenOffice.org is fully compatible with Microsoft Office and has everything you need to create professional documents, spreadsheets and

presentations. OpenOffice.org is easy to use, packed with the features you need and completely free.
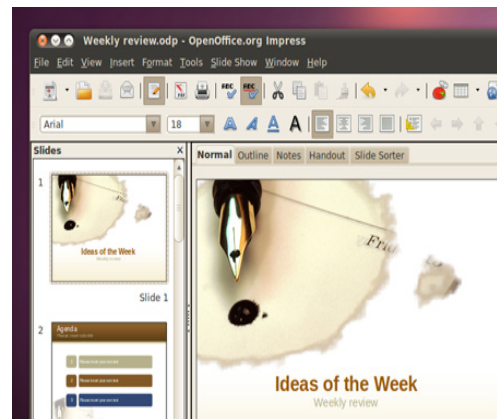
Included software:

OpenOffice.org

Get free software

The Ubuntu Software Centre gives you instant access to thousands of free open-source applications. Browse software in categories including: education, games, sound and video, graphics, programming and office. Software is easy to find, easy to install and easy to remove.

Featured applications form the Ubuntu Software Center:

GIMP – Advanced image editing for graphic designers, photographers or simply for retouching your pictures.

Jokosher – Your very own home studio. Record, edit, mix and export.

Stellarium – A 3D planetarium for your computer.

Email and chat

Get chatting with Empathy. Quickly integrate your chat accounts from Yahoo, Gmail, MSN, Jabber, AOL, QQ and many more. Evolution Mail provides easy, intuitive email.

"In terms of software, Ubuntu is like the iPhone. Almost anything you'd care to do, there's an app for that."

The Guardian
27 October 2009
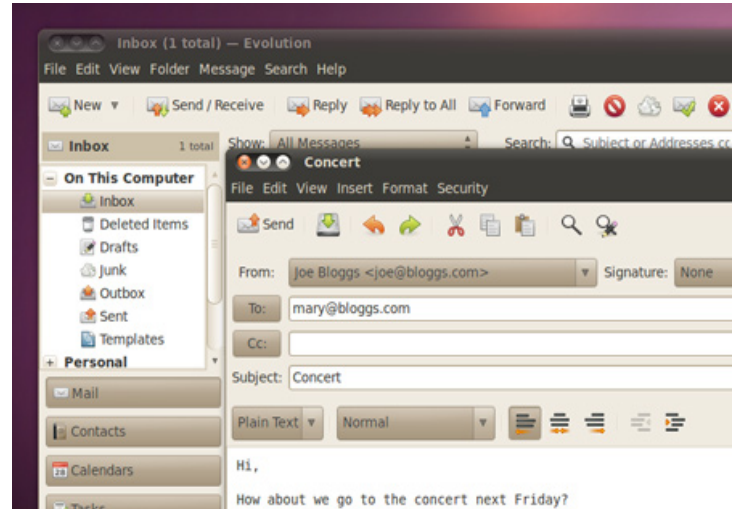
Included software:

Empathy IM

Evolution Mail

Gwibber Microblogging

Supported software:

Skype

Social from the start

New in 10.04. Read and update your social networks instantly. Ubuntu's new Me Menu lets you access your Facebook and Twitter accounts (and more) straight away. Connect to your chat channels and make updates through a single window. Being sociable has never been so easy.
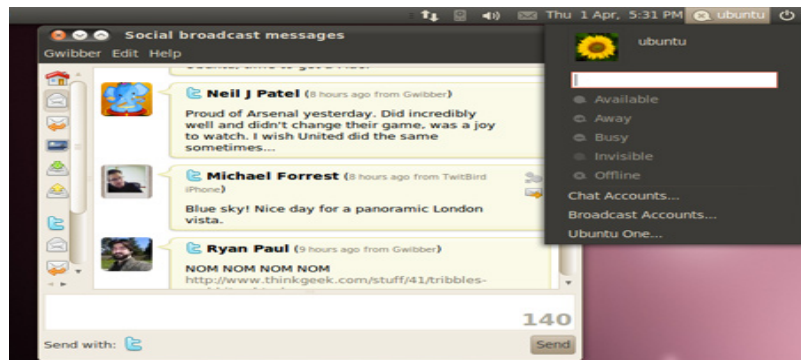
Included software:

Facebook

Twitter

Identi.ca

Buy music while you listen

New in 10.04. Ubuntu's music player includes an integrated store, so you can buy and download new tracks with just a few clicks. And thanks to Ubuntu One's file-syncing magic you can store your music online and listen

to it from other computers and music players. Ubuntu works with most music and media players.
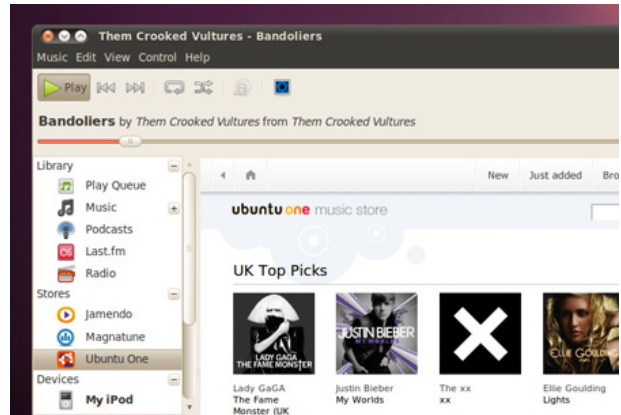
Included software:

Ubuntu One Music Store

Rhythmbox music player

View, store and edit photos

Ubuntu is ready for all your gadgets. Connect your phones and cameras to download your pictures. You can organise your photos with F-Spot and use popular tools like Picasa, Facebook and Flickr. For advanced photo editing, find a free application from the Ubuntu Software Centre.

Included software:

F-Spot
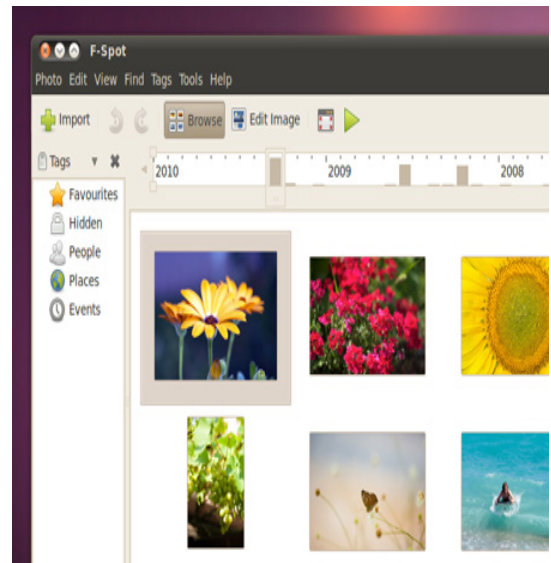
Mobilise your digital life!

All Ubuntu users get a free Ubuntu One account. Ubuntu One allows you to sync all kinds of files online so you can access them anywhere. Sync bookmarks, contacts, music and

pictures across all your computers. Take everything everywhere with Ubuntu One.

Make, play and edit video

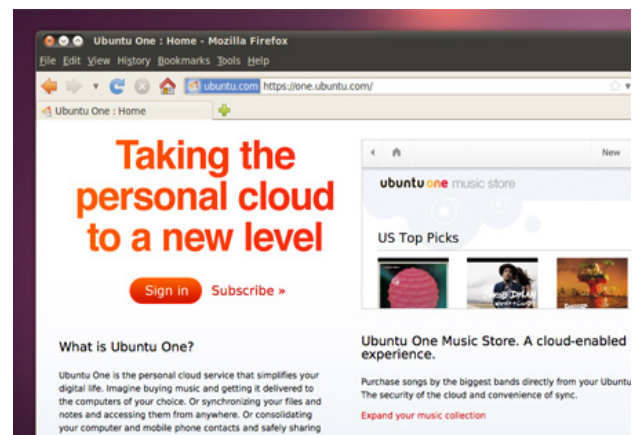Watch all your favourite content from YouTube, iPlayer, and MSN Player. Play your own videos with Movie Player or use Pitivi to edit your videos.

Included software:

Pitivi video editor

Movie Player
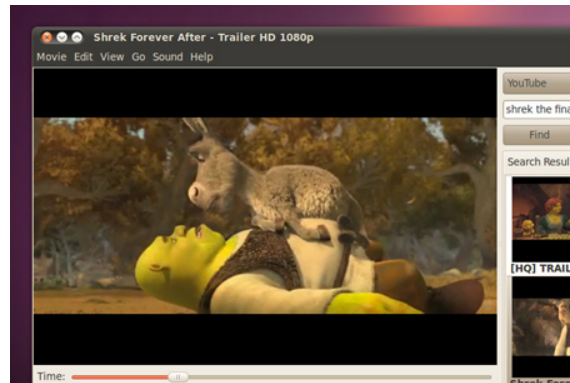
Start fast with Ubuntu

Ubuntu loads quickly on any computer, but it's super-fast on newer machines. After loading, opening a browser takes seconds, unlike other operating systems that leave you staring at the screen, waiting to get online.
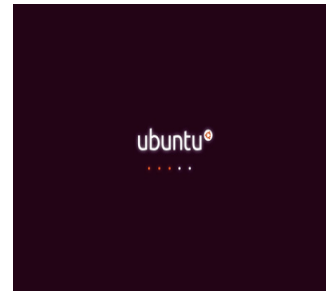
Choose from hundreds of free games

The Ubuntu Software Centre offers hundreds of games, including puzzles, adventures, tactical challenges and more. All free to choose and free to use.

Accessibility in Ubuntu

At the heart of Ubuntu's philosophy is the belief that computing is for everyone, whatever your circumstances. Ubuntu is one of the most accessible operating systems and

is fully translated into 25 languages with more being added all the time.

How CPU made

Author

**S.Nithya, Lecturer
Computer Science**

This article helps to know how a CP made by Intel company.

1) Sand. Made up of 25 percent silicon, is, after oxygen, the second most abundant chemical element that's in the earth's crust. Sand, especially quartz, has high percentages of silicon in the form of silicon dioxide (SiO2) and is the base ingredient for semiconductor manufacturing.

2) After procuring raw sand and separating the silicon, the excess material is disposed of and the silicon is purified in multiple steps to finally reach semiconductor manufacturing quality which is called electronic grade silicon. The resulting purity is so great that electronic grade silicon may only have one alien atom for every one billion silicon atoms. After the purification process, the silicon enters the melting phase. In this picture you can see how one big crystal is grown from the purified silicon melt. The resulting mono-crystal is called an ingot.

3) A mono-crystal ingot is produced from electronic grade silicon. One ingot weighs approximately 100 kilograms (or 220 pounds) and has a silicon purity of 99.9999 percent.
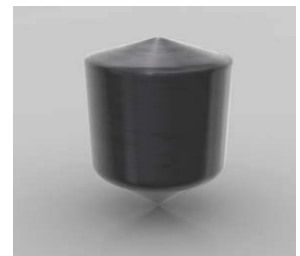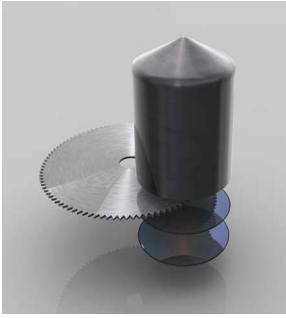
4) The ingot is then moved onto the slicing phase where individual silicon discs, called wafers, are sliced thin. Some ingots can stand higher than five feet. Several different diameters of ingots exist depending on the required wafer size. Today, CPUs are commonly made on 300 mm wafers.

5) Once cut, the wafers are polished until they have flawless, mirror-smooth surfaces. Intel doesn't produce its own ingots and wafers, and instead purchases manufacturing-ready wafers from third-party companies. Intel's advanced 45 nm High-K/Metal Gate process uses wafers with a diameter of 300 mm (or 12-inches). When Intel first began making chips, it printed circuits on 50 mm (2-inches) wafers. These days, Intel uses 300 mm wafers, resulting in decreased costs per chip.
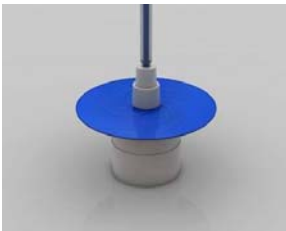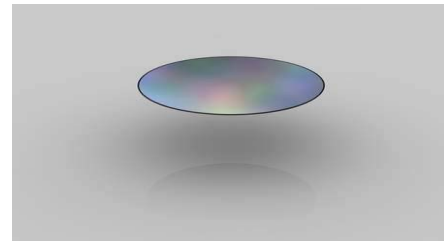
6) The blue liquid, depicted above, is a photo resist finish similar to those used in film for photography. The wafer spins during this step to allow an evenly-distributed coating that's smooth and also very thin.

7) At this stage, the photo-resistant finish is exposed to ultra violet (UV) light. The chemical reaction triggered by the UV light is similar to what happens to film material in a camera the moment you press the shutter button.

Areas of the resist on the wafer that have been exposed
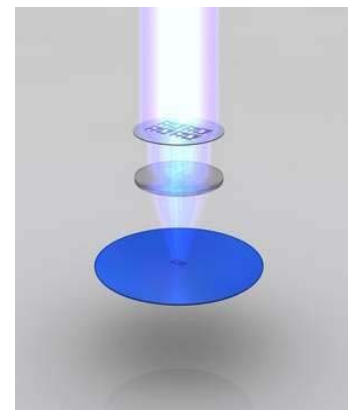
to UV light will become soluble. The exposure is done using masks that act like stencils. When used with UV light, masks create the various circuit patterns. The building of a CPU essentially repeats this process over and over until multiple layers are stacked on top of each other. A lens (middle) reduces the mask's image to a small focal point. The resulting "print" on the wafer is typically four times smaller, linearly, than the mask's pattern.
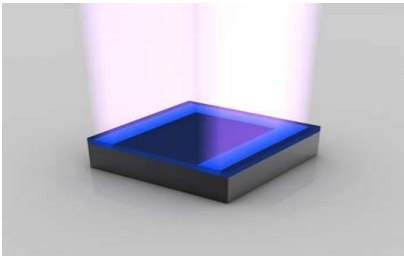
8) In the picture we have a representation of what a single transistor would appear like if we could see it with the naked eye. A transistor acts as a switch, controlling the flow of electrical current in a computer chip. Intel researchers have developed transistors so small that they claim roughly 30 million of them could fit on the head of a pin.

9) After being exposed to UV light, the exposed blue photo resist areas are completely dissolved by a solvent. This reveals a pattern of photo resist made by the mask. The beginnings of transistors, interconnects, and other electrical contacts begin to grow from this point.
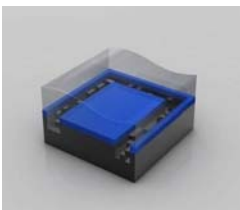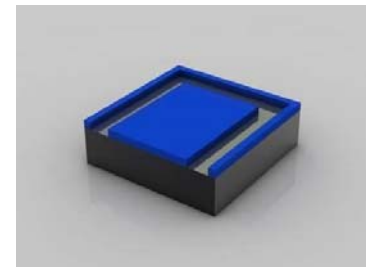
10) The photo resist layer protects wafer material that should not be etched away. Areas that were exposed will be etched away with chemicals.

11) After the etching, the photo resist is removed and the desired shape becomes visible.
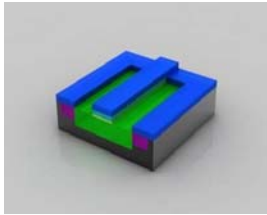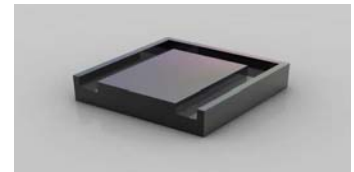
12) More photo resist (blue) is applied and then re-exposed to UV light. Exposed photo resist is then washed off again before the next step, which is called ion doping. This is the step where ion particles are exposed to the wafer, allowing the silicon to change its chemical properties in a way that allows the CPU to control the flow of electricity.

13) Through a process called ion implantation (one form of a process called doping) the exposed areas of the silicon wafer are bombarded with ions. Ions are implanted in the silicon wafer to alter the way silicon?i these areas conduct electricity. Ions are propelled onto the surface of the wafer at very high velocities. An electrical field accelerates the ions to a speed of over 300,000 km/hour (roughly 185,000 mph)
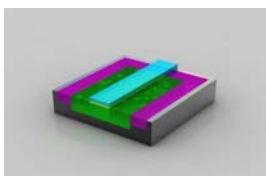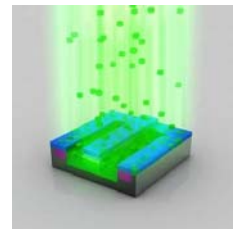
14) After the ion implantation, the photo resist will be removed and the material that should have been doped (green) now has alien atoms implanted.

15) This transistor is close to being finished. Three holes have been etched into the insulation layer (magenta color) above the transistor. These three holes will be filled with copper, which will make up the connections to other transistors.
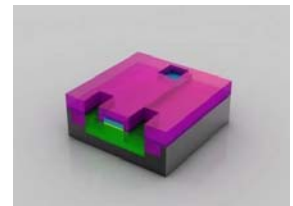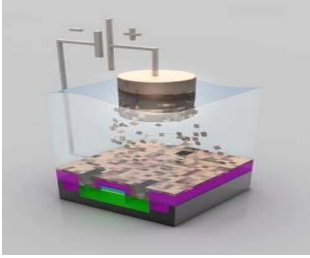
16) The wafers are put into a copper sulphate solution at this stage. Copper ions are deposited onto the transistor through a process called electroplating. The copper ions travel from the positive terminal (anode) to the negative terminal (cathode) which is represented by the wafer.

17) The copper ions settle as a thin layer on the wafer surface. The excess material is polished off leaving a very thin layer of copper.
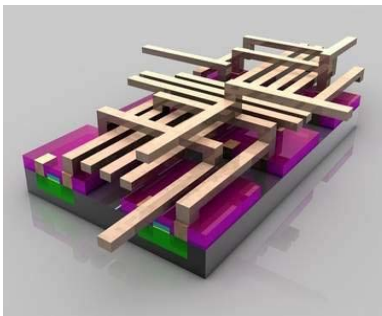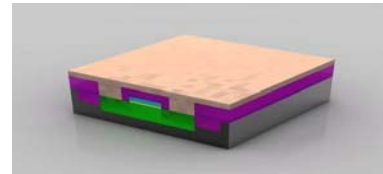
18) Multiple metal layers are created to interconnects (think wires) in between the various transistors. How these connections have to be "wired" is determined by the architecture and design teams that develop the functionality of the respective processor (for example, Intel's Core i7 processor). While computer chips look extremely flat, they may actually have over 20 layers to form complex circuitry. If you look at a magnified view of a chip, you will see an intricate network of circuit lines and transistors that look like a futuristic, multi-layered highway system.

19) This fraction of a ready wafer is being put through a first functionality test. In this stage test patterns are fed into every single chip and the response from the chip monitored and compared to "the right answer."
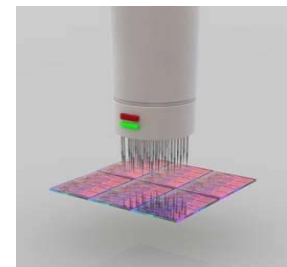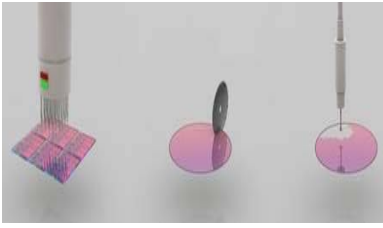
20) After tests determine that the wafer has a good yield of functioning processor units, the wafer is cut into pieces (called dies)

21) The dies that responded with the right answer to the test pattern will be put forward for the next step (packaging). Bad dies are discarded. Several years ago, Intel made key chains out of bad CPU dies.
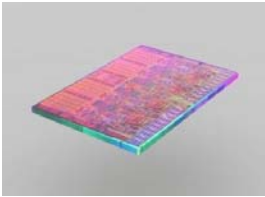
22) This is an individual die, which has been cut out in the previous step (slicing). The die shown here is a die of an Intel Core i7 processor.

23) The substrate, the die, and the heatspreader are put together to form a completed processor. The green substrate builds the electrical and mechanical interface for the processor to interact with the rest of the PC system. The silver heatspreader is a thermal interface where a cooling solution will be applied. This will keep the processor cool during operation.
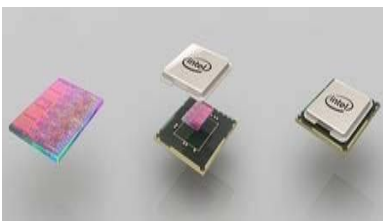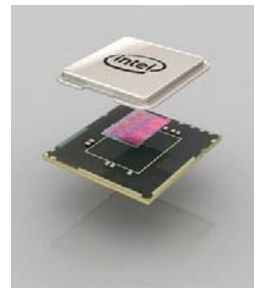
24) A microprocessor is the most complex manufactured product on earth. In fact, it takes hundreds of steps and only the most important ones have been visualized in this picture story.

25) During this final test the processors will be tested for their key characteristics (among the tested
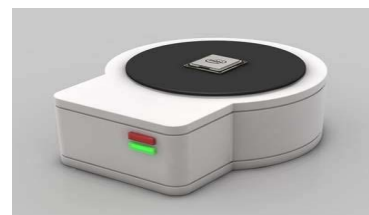
characteristics are power dissipation and maximum frequency).

26) Based on the test result of class testing processors with the same capabilities are put into the same transporting trays. This process is called "binning". Binning determines the maximum operating frequency of a processor, and batches are divided and sold according to stable specifications.

27) The manufactured and tested processors (again Intel Core i7 processor is shown here) either go to system manufacturers in trays or into retail stores in a box.

Garage inventors

Author

Ms.M.M.Kavitha,Lecturer
Computer Science

This article helps to know about the Garage inventors

'Garage inventors' is a term used to describe individuals or groups of inventors that create independently. They are not on a salary or salary/incentive basis, paid by their companies to invent; they work alone, on their own or in small groups, generally in someone's garage or other part of the home. **Popular Science** recognizes the accomplishments of these independent inventors yearly in the June issue of its magazine. Here are the 10 winning inventions...

1. OneBreath: An Inexpensive Portable Ventilator

<u>OneBreath portable ventilator system with inventor Matthew Callaghan:</u>

Inspired by the need to help more patients in a crisis situation, such as a pandemic, postdoc fellow at Stanford University, Matthey Callaghan developed a no-frills ventilator that runs on a 12 volt battery that works for up to 12 hours and can be easily transported.

Because hospital ventilators typically cost from $3,000 to $40,000, hospitals generally would not have enough ventilators for patients who need them in a pandemic. Callahan and a few fellow students took on the ventilator project so that hospitals would be prepared... just in case. Their device uses a $10 pressure sensor like one you would find in a blood pressure monitor. It pumps air into the chest through the mouth and a sensor monitors how much air is in the lungs. Sensor data is fed into a software program to calculate the data, letting the ventilator know when the patient needs air again.

2. KOR-fx: Ultra Sensation Gaming Device

<u>KOR-fx shown by inventor Shahriar S. Afshar:</u>

A visiting physics professor at Rowan University, Shahriar S. Afshar is living in campus housing, which makes him subject to the bass vibrations from surrounding gamers' rooms. The interference made it pretty hard for Afshar to get his work done. An inventor since childhood, Afshar invented the KOR-fx as self protection.

The KOR-fx is a device that connects to gaming consoles, PCs, or music players. It sits around the shoulders, and the two transducers that lie on one's chest translate stereo sound into stereo vibrations. That way, gamers can feel complete immersion in their games without involving others who are not playing. "We can induce the sensation of rain, wind, weight shift, even G-forces," he said. His company, **Immerz**, is in talks with several studios to add these effects to films.
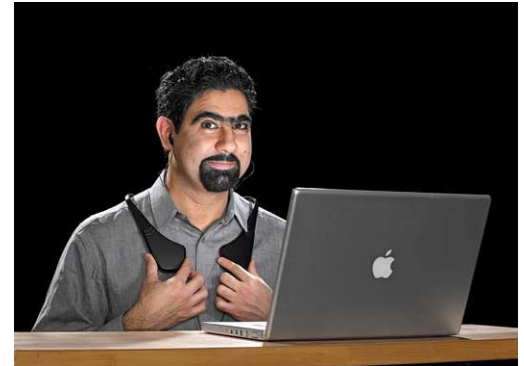
3. SmartSight: A Third Eye For Assault Rifles

SmartSight outfitted rifle, inventor Matthew Hagerty:,

After 10 years and many prototypes, inventor (and perfectionist) Matthew Hagerty finally is close to what he wanted his invention, the SmartSight, to be: a third eye for soldiers that enable them to see around corners and even behind their backs without putting themselves in the line of fire. SmartSight's latest design includes a 1.5 pound video camera positioned under the end of an assault rifle, a tiny computer that receives the video transmission attached to a soldier's vest, and a tiny display monitor worn on a soldier's protective glasses that receives video images in real time from the computer.

The whole device weighs only three pounds, and though Hagerty says he would like to make the device even lighter, his SmartSight invention, as it is, can save thousands of soldiers' lives from ambushes. Just think about

being able to point and shoot a weapon at a target without even physically facing it.

4. EverTune: Guitar Tuning Revolutionized

EverTune, inventors Cosmos Lyles and Paul Dowd:,

Guitar players and their audiences are in for a shock. Cosmos Lyles and Paul Dowd have invented a guitar tuner you only tune once. Right. Not in the middle of a song, not between songs, not between sets. Just once. EverTune, the pair's invention, is a bridge that keeps your strings in place by the action of six springs and levers that keep the strings' tension, even if your tuning pegs loosen or tighten accidentally.

Lyles and Dowd are in talks with guitar makers to embed EverTune in new guitars, but EverTunes will be made separately to fit many older guitars. I'm just wondering what guitarists will do to buy some extra time between sets now... drink some more water, I suppose.

5. SoundBite: Non-Surgical Bone Conduction Hearing Aid For One-Sided Deafness

SoundBite invented by Amir Abolfathi:

Hearing aids amplify external sounds for those that have some residual hearing. But when the cochlea (the auditory portion of the inner ear) doesn't function, hearing aids don't do any good. For single-sided cochlea-involved deafness, there is a transplantable titanium device *implanted* to the base of the skull nicknamed BAHA. But Amir Abolfathi, former Invisalign vice president,
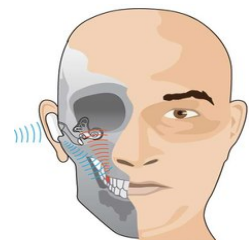
came up with a new idea while sitting in traffic one day. (That's when inventors get their best ideas!)

Knowing that teeth are excellent sound conductors to bone, he thought why not create a bone conduction aid from the mouth. With the help of an otolaryngologist, Abolfathi developed the SoundBite, an acrylic tooth insert (a custom-molded retainer) with a receiver that picks up sound from an in-ear microphone and then transmits the sound from the teeth to the bone up the jawline to the cochlea.

In clinical trials, typical reports from patients in tests if the device were that the SoundBite restored 80 to 100 percent of their hearing.

6. Groasis Waterboxx: A Biomimetic Planter

Groasis Waterboxx, inventor Pieter Hoff:

In his past life as a flower exporter, Pieter Hoff often oversaw the evening activities of his lilies. He noticed that the plants collected condensation on their leaves and the water droplets were sucked in by the leaves as they cooled. Mimicking nature's efficient watering system, Hoff developed a planter that could capture water in the same manner to foster sapling trees even in harsh conditions.

The Groasis Waterboxx is designed as a plant incubator, which cools faster than the night air, allowing water to condense and flow into it along with rainwater to keep the plant and its roots hydrated and protected. Hoff's tests of the Waterboxx in the Sahara have been quite successful; after one year of growing saplings in the desert, 88 percent of the trees he planted had green leaves, while 90 percent of those planted in the local method died from the scorching sun.

7. Zoggles: Anti-Fog Device

<u>Zoggle inventors Don A Skomsky and Valerie Palfy:</u>

The device you see on Don Skomsky in the above photo is a Zoggles, but Zoggles is actually a whole technology that Skomsky and Valerie Palfy invented to keep fog from forming on lenses and windows. The pair created a device with a humidity sensor and a temperature sensor that would stay colder than, say, a windshield, so they would sense when fog was coming and would turn on an automobile's defroster.

But Skomsky was able to use an obscure formula to predict when fog would form based on the temperature and humidity, so that the bulky controls could all fit on a chip. The Zoggles now operate with that chip, which calculates when the lens needs to be heated and activates a heater that shuts off when it is no longer needed. Palfy and Skomsky are planning to license their technology to manufacturers of motorcycle helmets, windshields, scuba masks, and military gear.

8. Mini Infuser: Foolproof Programmable, Disposable Infusion Drug Pump

Mini Infuser invented by Mark Banister: Photo: John B. Carnett,

Mark Banister wasn't on his way to developing the first programmable infusion drug pump, but while investigating another idea, the infusion pump idea grabbed him. After working with an incubator program at the Arizona Center for Innovation, he was able to develop this drug pump in a way that could save hospitals money and make patients feel a whole lot more secure.

The Mini Infuser is the only disposable drug pump that can be programmed to dispense drugs continuously. Taped to the patient's chest, a microprocessor inside the pump sends dosage information to the polymer that Bannister developed to deliver the correct dosages. Upon receipt of dosage information, this special polymer will expand and displace the proper dosage from the reservoir within the pump where the drugs are stored.

9. ECO-Auger: Fish-Saving Tidal Energy Turbine

ECO-Auger, invented by W. Scott Anderson: Photo: John B. Carnett,

Windmill turbines that convert tidal energy into electricity are costly and involve permanent installations that may harm marine life. W. Scott Anderson, an industrial engineer, invented a simpler, less invasive tidal energy converter that's less costly and more marine-friendly. It uses an auger, a spiral-shaped device that has tapered ends, so as not to harm fish. When the current spins the auger, it induces a hydraulic pump in the nosecone of the device to pump high pressure oil that turns a generator outside of the water.

Though Anderson had made several small prototypes of the ECO-auger to test function and safety around fish, he has hand-crafted his first large prototype that has a two-foot diameter and a polyurethane/ fiberglass auger. In a test, Anderson said it captured 14 percent of the water's energy, which is not as much as the windmill turbines, but Anderson says the percentage will go up as the diameter of the augers increase. He is sure that ultimately the ECO-Auger will be more cost effective and just as productive as the windmill turbine.

10. RAD Technology: A Drag-Ready Snowmobile

RAD Technology, invented by Shawn Watling: Photo: John B. Carnett

Shawn Watling, a self-taught engineer, has created the first rear-drive, adjustable rear suspension snowmobile that is faster, safer, and more efficient than the snowmobiles produced today. Snowmobile racing since he was only 9 months old (presumably as a passenger), the 35 year old Watling decided to put together his own snowmobile out of a scrapped ATV, a 130 horsepower snowmobile motor and transmission to drag race on his local drag strip.

The 'Frankenstein' was fast, and a dynamometer test revealed that 85 percent of its engine power was delivered to the ground, while a typical snowmobile only hit about 55 percent. This result led him to discover that it was the rear suspension on front drive manufactured snowmobiles that increased rolling resistance and prevented adequate track tension.

Since Frankenstein, Watling's rear-drive prototypes have been numerous, but five years later he has made corrections in everything that slows a snowmobile down, and his RAD (rear-axle-drive) Technology has also produced a safer snowmobile that's more fuel efficient.

This month That day

October5, 1999

Advanced Micro Devices first announced the specifications of its new 64-bit x86 architecture and its new system bus, the Lightning Data Transport. The two technologies will be combined in the company's eighth-generation processors. The new processors were backward-compatible with the 32-bit x86 processors of the time. Code-name: Sledgehammer

Apple Computer unveiled a new line of iMac computers that featured version 9 of the new Macintosh operating system. The line, which will start at prices as low as $999, will include a new iMac, iMac DV, and iMac DV Special Edition, all housed in graphite-tinted cases. The operating system will also be available separately for $99.

Yahoo! launched the Yahoo! Wallet ecommerce service.

October6, 1987

Microsoft introduced Microsoft Windows 2.0 and Microsoft Windows/386 operating systems. Windows 2.0 introduces the notable advance of allowing individual system windows to overlap each other, unlike Windows 1.0, in which windows could only be tiled. The system is also the first to introduce the now-standard terms "Minimize" and "Maximize." Price: $195
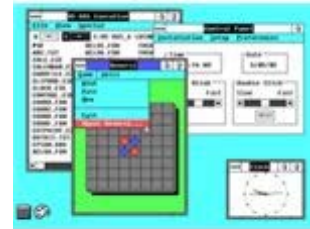
Microsoft introduced the Microsoft Excel spreadsheet application for Microsoft Windows 2.0, to compete with Lotus 1-2-3 and VisiCalc. While, substantively, Excel varies little from its two competitors in terms of performance and capabilities, Excel's glossy interface will quickly bring it to the forefront of the spreadsheet market. Despite Microsoft's thriving sucess, the application is consider to be the company's first major release, putting Microsoft on the map for business consumers.

October 8, 1996

The United States Postal Service announced a commemorative "Computer Technology" postage stamp marking the fiftieth anniversary of the first digital

computer, ENIAC. The stamp was officially released at a tribute ceremony held at the Aberdeen Army Proving Grounds, during which industry leaders and members of academia paid tribute to history's great computer pioneers. The stamp, which bears an abstract image of a human brain covered in blocs of circuitry and binary code, was wholly computer designed. It was the first U.S. stamp to be designed entirely by computer.

Version 4.0 of the Red Hat Linux operating system, dubbed "Colgate," was released.

October12, 2005

Apple Computer released the fifth generation iPod, which introduced video playback capabilities to the line. The devices were significantly thinner than their predecessors and offered a search feature, re-designed earphones, gapless playback, and brighter, larger screens for the exact same price as the fourth generation players. They also features 80GB capacities, expanded from 60GB.

Apple Computer launched video sales on its iTunes music service. In the United States, each video costs $1.99, and in the United Kingdom, each video costs £1.89. Within the month, iTunesOver sold over one million videos.

A javascript began circulating online that forced Microsoft's website to validate a Window installation, circumventing Microsoft's Windows Genuine Advantage system.

Disney's CEO officially announced the availability of ABC television network programming through Apple Computer's iTunes service. Episodes of select series would be available just one day after its broadcast.

October16, 1956

The first high-level programming language, FORTRAN, was released by an IBM team lead by John W. Backus.

October 20, 2004

The first version of the free Ubuntu Linux operating system, based on the Debian GNU distribution, was released. Its name is the Zulu work for humanity. It was designed to provide a stable distribution suitable for the average computer user.

Intel released the 2.1 GHz Pentium M 765 processor for notebook computers, featuring a 2,048 KB level-2 cache, a 400 MHz front-side bus. Price: $637 in 1000-unit quantities

Semiconductor manufacturer Infineon Technologies pleads guilty to charges of price fixing in the dynamic random access memory (DRAM) market and is subsequently fined one hundred sixty million dollars, which is only the third largest antitrust fine ever handed down in U.S. history. Four of the company's executive officers had been sentenced to up to a six month prison term a week prior.

Sharp Electronics announced that it will discontinue the development and retail sale of handheld computers in the U.S.

History of Computing Germany

Author

P.Gowri Shankar
Programmer

This article helps to know about the the most important machines and inventions.

Most important machines and inventions
GE = Germany GDR = German Democratic Republic (former east Germany)

Manufacturer	Type	Country	Date	Reference
Zuse	Z1	GE	1938	RS2
Zuse	Z2	GE	1939-04	RS2
Zuse	Z3	GE	1941-12	RS2
Zuse	S1	GE	1942	RS p47
Zuse	S2	GE	1943	RS p47
Zuse	Z4	GE	1944	BW 2
Zuse	Z5	GE	1952	DP V5#3
Max Planck Institute	G1	GE	1953	CACM 1961
Zuse	Z11	GE	1954	DP V5#3
TH Darmstadt	GERA	GE	1955	CACM 1961
Max Planck Institute	G2	GE	1955	CACM 1961
TH Munich	PERM	GE	1955	CACM 1961

Siemens	2002	GE	1956	DP V5#6
Zuse	Z22	GE	1956	DP V5#3
Robotron	DresGEn 1 (D1, D1-2)	GDR	1956	
SEL+	ER-56	GE	1957	
Zuse	Z22R	GE	1958	PIRE JAN61
Siemens	4/7/02	GE	1959-06	
Zuse	Z23	GE	1960	PAL p334
Robotron	PRL	GDR	1960	
AEG Telefunken	TR-4	GE	1962	PAL p335
AEG Telefunken	RAT 700 (Ana.)	GE	1962	
Zuse	Z31	GE	1962-12	PAL p334
AEG Telefunken	RA 800 (Ana)	GE	1963	
AEG Telefunken	RAT 740 (Ana)	GE	1963	
Zuse	Z25	GE	1963-04	PAL p335
Robotron	R100	GDR	1963	
Siemens	3003	GE	1963-12	
AEG Telefunken	TR-10	GE	1964-09	PAL p336
Siemens	4004	GE	1964	
Nixdorf	820 (820 P)	GE	1964	

Siemens	303	GE	1965_04	PAL p337
Siemens	4004/15	GE	1965-10	PAL p337
Siemens	4004/25	GE	1965-10	PAL p337
Zuse	Z32	GE	1966-01	PAL p337
	CCD 516	GDR	1966-06	BW 393
Siemens	4004/45	GE	1966-06	PAL p338
Siemens	4004/55	GE	1966-12	PAL p338
Siemens	4004/35	GE	1967-02	PAL p338
Zuse	Z26	GE	1967-05	PAL p338
AEG Telefunken	TR-86	GE	1967-06	PAL p338
AEG Telefunken	TR-440 (Mainframe	GE	1967-06	PAL p338
Nixdorf	820 /20	GE	1967	
Siemens	302	GE	1967-09	PAL p339
Siemens	305	GE	1967-11	PAL p339
Siemens	304	GE	1968-06	PAL p339
Robotron	R300	GDR	1968	
AEG Telefunken	TR-84	GE	1968	
Nixdorf	820 /15	GE	1968	
Siemens	301	GE	1969	DP Jul72
Diehl	Combitron S	GE	1969	
Robotron	R300	GDR	1970-05	C&I May70

Kienzle	6016 s	GE	1970	
Siemens	320	GE	1971-07	DP Jul72
AEG Telefunken	TR 4404	GE	1973	
Siemens	330	GE	1973	
Robotron	EC 1040	GDR	1973-04	
Nixdorf	820 S	GE	1973	
Nixdorf	880/55	GE	1973	
Nixdorf	8870 (-2,-4)	GE	1974	
Nixdorf	6615	GE	1974	
Nixdorf	880/65	GE	1974	
Nixdorf	8870/-1 (Comet)	GE	1974	
Siemens	310	GE	1974	
Siemens	4004/150	GE	1974	
AEG Telefunken	60/10	GE	1974	
AEG Telefunken	CPF/3 (SBC)	GE	1974	
	ES-1040	GDR	1974	CS Jun78
Kienzle	6000 BTS	GE	1974	
Kienzle	6100	GE	1974	
Kienzle	6600	GE	1975-04	
AEG Telefunken	ATM 80 (20/40/60)	GE	1975	
Siemens	4004/151	GE	1975	

Robotron	KRS 4201	GDR	1975	
Robotron	DARO 1602	GDR	1975	
Robotron	DARO 1720	GDR	1975	
Robotron	DARO 1840	GDR	1975	
Nixdorf	6600	GE	1975	
Nixdorf	8820	GE	1975-03	
Nixdorf	8830 (Firm, FAC, Mkc)	GE	1975	
Nixdorf	8864	GE	1975	
Nixdorf	8870/-3	GE	1975	
Nixdorf	8870/-6	GE	1975	
Nixdorf	620	GE	1976	
Nixdorf	8409	GE	1976	
Nixdorf	8862, MoGEII 2	GE	1976	
Siemens	4004/45	GE	1976	
Siemens	340	GE	1976	
Hohner	620 M	GE	1976-04	
Hohner	660 M	GE	1976-04	
Hohner	Dataket	GE	1976-04	
Hohner	HC 1 /101	GE	1976-04	
Hohner	HC 1 /400	GE	1976-10	
Hohner	HC 1 /700	GE	1976-10	
AEG Telefunken	TR 445 DP	GE	1976	

AEG Telefunken	TR 540	GE	1976	
Robotron	R 21 (Mainframe)	GDR	1976	
Robotron	DARO 1416	GDR	1976	
Kienzle	2000	GE	1976	
Kienzle	6600/-4, -6, -7, -8	GE	1976	
Kienzle	EFAS (2000,2200)	GE	1976	
Diehl	DS 2000	GE	1977-03	
Diehl	DS 3000	GE	1977-03	
Kienzle	BGE 1620	GE	1977-03	
Kienzle	9066	GE	1977	
Robotron	DARO 1750	GDR	1977	
Robotron	K 1510	GDR	1977	
Robotron	ZE 1	GDR	1977	
Siemens	48/04	GE	1977	
Siemens	P7760	GE	1977	
U of Erlangen	EGPA	GE	1977	P89
Siemens	306	GE	1978	
Siemens	6600	GE	1978	
AEG Telefunken	80-20/2	GE	1978	
AEG Telefunken	Telecomp 5200	GE	1978	

Kienzle	9066	GE	1978	CR90
Robotron	4000	GDR	1978	
Robotron	A5201	GDR	1978	
Robotron	A5203	GDR	1978	
Robotron	DARO 1711	GDR	1978	
Robotron	K 1520	GDR	1978	
Robotron	PRS 4001	GDR	1978	
Robotron	K 1001	GDR	1978	
Kienzle	1200	GE	1978	
Kienzle	3700	GE	1978	
Kienzle	5100	GE	1978	
Nixdorf	620/-25	GE	1978	
Nixdorf	LK 3000	GE	1979	
Nixdorf	8850	GE	1979	
Nixdorf	8860	GE	1979	
Kienzle	9027	GE	1979	
Siemens	6100	GE	1979	
Robotron	K 1002	GDR	1979	
Robotron	K 1003	GDR	1979	
Diehl		GE	1979-03	
Kienzle	9055	GE	1980	CR90
Robotron	A 6401	GDR	1980	
Robotron	K 5103	GDR	1980	
Robotron	K 5201	GDR	1980	

Robotron	K 8924	GDR	1980	
Robotron	EC 1055	GDR	1980	
Robotron	K 1600	GDR	1980	
Kienzle	9055 (ABC computer)	GE	1980	
Nixdorf	8890	GE	1980	
Kienzle	9066/90	GE	1981	
Kienzle	9010	GE	1981	
Robotron	EC 1055 M	GDR	1981	
Siemens	5500	GE	1981	
AEG Telefunken	80/30	GE	1981	
Nixdorf	8840/-3, -5	GE	1981	
Nixdorf	8860/-7, -10	GE	1981	
Nixdorf	8860/05	GE	1982	CR90
Nixdorf	8810	GE	1982	
Nixdorf	8860/10	GE	1982	CR90
Nixdorf	8860/40	GE	1982	CR90
Nixdorf	8890-1012	GE	1982	CR90
Nixdorf	8890-3032	GE	1982	CR90
Nixdorf	8890-5052	GE	1982	CR90
Nixdorf	8890-7072	GE	1982	CR90
AEG Telefunken	Synfobase	GE	1982	
Robotron	MC 80	GDR	1982	

Kienzle	9022	GE	1982	
Kienzle	9033	GE	1982	
Kienzle	9044	GE	1982	
Kienzle	9066/KS	GE	1982	
Kienzle	9077	GE	1982	
Kienzle	9088	GE	1982	
Robotron	LC 80 (SBC)	GDR	1983	
Nixdorf	8870/10	GE	1983	CR90
Nixdorf	8870/35	GE	1983	CR90
Nixdorf	8870/50	GE	1983	CR90
Kienzle	9033	GE	1983	CR90
Kienzle	9044	GE	1983	CR90
Kienzle	77	GE	1983	CR90
Nixdorf	8850	GE	1984	CR90
Nixdorf	8855/10	GE	1984	CR90
Nixdorf	8870/	GE	1984	CR90
Kienzle	9122	GE	1984	CR90
Kienzle	9133/9144	GE	1984	CR90
Kienzle	9155/9166	GE	1984	CR90
Kienzle	9177/9188	GE	1984	CR90
Parsytec	SuperCluster	GE	1987	P 231

GET ON NET

The below links gives common information regarding interview .

http://www.superjobsonline.com/interview/interview_basics/index.html

 contains…..

- o Resume Writing Tips
- o Interview Preparation
- o All about walk-in interviews
- o What interviewers observe?
- o How to participate effectively in group discussion?

http://www.communicationskills.co.in/ : provides more information on the communication skills.

http://www.eveandersson.com/general-comments/attachment/1565/50interviewqas.pdf

Puzzles asked in interviews

http://placementpapers.net/helpingroot/INFOSYS_INTERVIEW_PUZZLES_WITH_ANSWERS

http://www.techinterviews.com/programming-puzzles-riddles-and-interview-problems

Links for Aptitude Questions

http://placementpapers.net/helpingroot/files/Aptitude-Test-Paper-By-Placementpapers.net_.pdf

http://www.niitimperia.com/fileadmin/pdf/Illustrative_Questions.pdf

http://www.exforsys.com/forum/placement-papers/43874-aptitude-questions-with-answers.html : provides aptitude questions with answers.

http://www.coolinterview.com/type.asp?iType=103

Tutorials for JavaScript

http://www.w3schools.com/js/default.asp

http://www.tizag.com/javascriptT/

http://www.webteacher.com/javascript/

Tutorials for Software Testing

http://www.testingbrain.com/TUTORIALS/Software_TESTING_tutorial.html : This link provides materials and supporting discussion for teaching the **software testing** course.

http://www.etestinghub.com/

http://www.buzzle.com/articles/software-testing-tutorial.html

Linux Tutorial : http://tldp.org/LDP/intro-linux/html/

Midori is coming

Author

Ms.Priyanka,Lecturer
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     This article gives information about the Midori which overcomes the Windows.

WINDOWS is a name that has ruled the whole computer world since its first launch in November 1985. Since then it is like a trademark of Microsoft Corporation.

With many advanced versions of Windows available today such as Windows XP, Windows Vista, it is the most used operating system in the world. Microsoft has launched WINDOWS 2007 this year (2010), but now here is time to experience a yet another technology of operating systems.

MICROSOFT is working on a new generation of operating systems called Cloud-Based Operating System and rumors are there that MIDORI will be their first such operating system, which will replace Windows fully from computer map.

WHAT'S THE DIFFERENCE

MIDORI is an offshoot of Microsoft Research's Singularity operating system. In this the tools and libraries are completely managed code. MIDORI is designed to run directly on native hardware (x86, x64 and ARM), will be hosted on the Windows Hyper-V hyper visor, or even be hosted by a Windows process.

MIDORI can be also seen as MICROSOFT'S answer those competitors who are applying "Virtualization" as a mean to solving issues within contemporary computing.

The main idea behind MIDORI is to develop a lightweight portable OS which can be mated easily to lots of various applications.

IMPORTANCE OF MIDORI

For knowing the importance of MIDORI you have to think about, how an operating system is loaded on a computer. Actually operating system is loaded onto a hard disk physically located on that machine. In this way, the operating system is tied very tightly to that hardware. As Windows is dependent on hardware, it might face opposition from contemporary ways of working because people are extremely mobile in using different devices in order get diverse information.

Due to this trend installing different applications on a single computer may led to different compatibility issues whenever the machine require updating. The new operating system will solve these problems by the concept of Virtualizing. This will solve problems such as widespread security

vulnerabilities, unexpected interactions among different applications, failures caused by errant extensions, plug-ins, and drivers and many more.

WHEN WILL IT BE LAUNCHED

Just Wait and See. Microsoft has not declared any such date about launching of MIDORI, but there are rumors that this project is in incubation phase.

Hope we will start using the MIDORI soon.

MYSELF IN BOOKSHELF

Myself **"2G Mobile Networks : GSM and HSCSD - Architecture, protocols, procedures and services"**, posses a lot of information about the 2G networking technology. My creators are **"Nishit Narang and Sumit Kasera"**. I am supported by **"Tata McGraw-Hill publishing company limited".** My information bank contains details regarding the fundamentals of GSM networks – from air interface to core networking, protocol architecture and procedures, including radio resource and mobility management. I also contain, the detailed information regarding basic wireless architecture. Finally, I provide information on the service aspects of GSM networks and more on High-Speed Circuit Switched Data. Hope my contents will be useful for the readers, and am waiting to share my information with the readers.

NOTE

➢ I am available at *"Main Library "* of our college.
➢ Rack Number - *14 " Electronics and Communication " .*

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- **The HOD, Sengunthar Arts & Science College**
- **The HOD, Muthayammal College of Arts & Science**
- **The HOD, PEE GEE College of Arts &, Science**
- **The HOD, Harur Muthu Arts & Science College for Women**
- **The HOD, Vivekanandha College of Arts & Sciences (W)**
- **The HOD, Mahendra Arts & Science college**
- **The HOD, Selvam Arts & Science college**
- **The HOD, St.Joseph's College of Arts & Science for (W)**
- **The HOD, Vysya College of Arts &, Science**
- **The HOD, NKR Government Arts College for Women**
- **The HOD, Arignar Anna Government Arts College**
- **The HOD, Salem Sowdeswari College**

- The HOD, P.G.P College of Arts & Science
- The HOD, Attur Arts & Science College
- The HOD, SSM College of Arts & Science
- The HOD, Government Arts College Salem
- The HOD, Government Arts College Men
- The HOD, Government Arts College, Dharmapuri
- The HOD, Gobi Arts and Science College (Autonomous)
- The HOD, Sri Kandhan College of Arts & Science
- The HOD, Sri Ganesh College of Arts & Science
- The HOD, Jairam Arts & Science College
- The HOD, Sri Balamurugan College of Arts & Science
- The HOD, PSG College of Arts and Science
- The Secretary, PSG College of Arts and Science
- The HOD, Kongunadu Arts and Science College(Autonomous)
- The HOD, Vivekanandha College for Women
- The HOD, Sri Vidhya Mandir Arts & Science College
- The HOD, *St*.John's College *Palayamkottai* - 627 007
- Mr. S.T.Rajan, St. Joseph's College, Trichy

We request the recipients of the book to kindly convey their feedback

'Linux replacing Windows in datacenters'

Linux's presence in the data center is growing rapidly. According to a survey by the Linux Foundation, Linux is growing at the expense of Windows in data centres.

According to the survey, "Migrations to Linux from Windows are surpassing those from Unix," with 37% coming from Windows and 31% from the Unix.

The report says that 76% of companies plan to add more Linux servers over the next 12 months, compared to 41% that plan to add Windows servers. The shift further accelerates over a five-year period with 79.4% planning to add more Linux; 21% more Windows.

Forty-four percent said they were planning to maintain their existing number of Windows servers, or decrease them over the next 12 Speaking at the launch of Acrobat X, Sandeep Mehrotra, Country Head, Sales, Adobe Systems India said that Ac-robat X is a strategic fit for India's complex and dynamic business environment. "As the Indian economy becomes increasingly interconnected, there is a greater need for months. In addition, 66% say their current Linux deploym-ents are new server deployments rather than placeme-nts for existing systems, showing Linux is at the forefront of new application implementations.

Little surprisingly cost remains a factor in Linux adoption. However, the survey also points out to factors such as security and technical superiority among top drivers. Sixty-eight percent cited technical superiority, 65% total cost of ownership, and 64% cited security. While 40% said that recession prompted increasing use of Linux at their organisations, 59% said that the open source tech use was not driven by economic realities dawned by recession.

WindowBlinds 7.2

[Stardock](#) - 49.29MB (Shareware)

WindowBlinds is a software utility that allows you to completely change the look and feel of Microsoft Windows.

It works by applying new visual styles, called skins, across the entire user interface (title bars, push buttons, start menu, taskbar, etc.) of the operating system. As a result, you gain complete control over the way Windows looks.

WindowBlinds gives users thousands of new looks to choose from. WindowBlinds can change the look of:

- Title bars
- Borders
- The Start bar
- Progress animations
- Explorer Views
- and virtually every other part of Windows!

Technical

Title: WindowBlinds 7.2

Filename: WindowBlinds7_public.exe

File size: 49.29MB (51,686,760 bytes)

Requirements: Windows XP / 2003 / Vista / Windows7 / XP64 /

Vista64 / Windows7 64

Languages: en-US

License: Shareware

Author: Stardock www.stardock.com

Homepage: www.stardock.com/products/windowblinds