



### Principal Message



I am very much pleased with the upcoming idea of releasing newsletter from the Department of Computer Science and Engineering of Kakatiya Institute of Technology & Science, Warangal. This is really a very good effort to keep the students abreast of the new technological trends and directions in the field of Computer Science & Engineering.

- Dr.K.Ashoka Reddy.

### Cheif Editors' Message



It gives me immense pleasure to announce the release of CSE department newsletter, foCuSE. The unique feature of the newsletter is that it is being planned and designed by the student fraternity alone. I wish that the tempo is continued in the days to come.

- Prof P.Niranjan Reddy.

## Recent Events

Technoplexus is a national level symposium conducted by the department of Computer Science and Engineering during the even semester every year. This event is organized with the objective of extracting the hidden talents of budding engineers belonging to various Engineering colleges all over India. Under this banner, the events like "Paper presentation", "Bug Tracking", "Poster Presentation", workshops on latest trends in Information Technology are organized.

### Faculty Editors

**M.Venugopal Reddy**  
Associative Professor

**K.Vinay Kumar**  
Asst. Professor

**M.S.B. Pridhvi Raj**  
Asst. Professor

**M.Preethi**  
Asst. Professor

### Chief Editor

**P.Niranjan Reddy**  
Head of the Department

### Student Editiors

**Mogal Akram Baig**  
B.Tech III/IV

**Jawahar Madineni**  
B.Tech III/IV

**Yokesh Thakre**  
B.Tech III/IV

## How to Use Public Computers Safely

When you use a public computer, you should clean up traces of your activity before leaving. You don't want the next user to recover your email conversations or passwords.

On your own personal computer, you're free to install whatever security software you feel necessary. You'll surely want a firewall to block hack attacks and an antivirus app to keep out malware. You may add a spam filter to protect your Inbox, or a security suite that wraps comprehensive protection in handy package. Your computer isn't accessible to random passers-by, so you may not be so worried about activity traces like browsing history.

Using a public computer at an Internet café, library, school, or even a friend's house is quite a different situation. First, you have no guaranteed that the computer is protected; it might be riddled with viruses or afflicted with a keylogger. Second, unless you're careful the next user might learn a lot more than you'd like about your online session.

### Built-in Safe Browsing.

For your convenience, the browser keeps a history of sites you've visited, stores cookies that retain personal settings for sites, and caches files for faster loading of sites you visited before. That's fine at home, but when you're using a public computer you don't want the browser storing all that information.

Fortunately most modern browsers can run in a mode that suppresses information-gathering and protects your privacy. You can right-click the Internet Explorer icon and choose "Start InPrivate Browsing," or right-click on the Firefox icon and choose "Enter private browsing." For either Firefox or IE, pressing Ctrl+Shift+P during a normal browsing session switches to private browsing. In Chrome, the private browsing mode is called "Incognito mode," and pressing Ctrl+Shift+N opens an Incognito mode window.

One more thing; be sure to shut down the browser when you're done. Even private browsing doesn't disable the Back button. You don't want the next user backing into your Facebook session or Web-based email account.

## I Forgot! Now What?

Of course, there's every possibility you'll sit down to a public computer, check your bank balance, send a few emails... and only later remember that you should have opted for privacy. Fear not; erasing your activity is simple. In Chrome, Firefox, or Internet Explorer you simply press Ctrl+Shift+Del to call up the dialog for deleting your history. The details vary, but you'll want to make sure you've selected all of the options for deletion. Chrome and Firefox let you specify how far back the cleansing should go. Do other users a favor and have it clear all history, not just the last hour.

## Cloak and Dagger

It's conceivable that the computer you're using might be seriously compromised security-wise. For example, a stealthed keylogger application could capture all passwords typed on the system. A hardware keylogger could do the same, with no possibility of detection by security software.

Your best bet is to simply refrain from sensitive transactions on a public computer. If you absolutely must log in to an important secure site on a suspect computer, here's one way to make password theft difficult: bring up a page with lots of text in the browser and copy/paste characters from that page into the password dialog. This "ransom note" style is decidedly tedious, but even a spy program that captures periodic screenshots probably won't snap all parts of your password.

### Secure Your Connection

A shady Internet café operator could possibly make some money on the side by siphoning passwords out of data packets passing through the wireless network. The guy at the next table might be intercepting your connection using Firesheep or a similar tool. If you really must engage in sensitive communication, you need to secure the connection.

One way to do that is through a VPN (Virtual Private Network), which routes your surfing through a secure connection. PCMag has rounded up a number of free VPN clients. The problem here is that you probably don't have permission to install them on the public computer. However, VPN protection is definitely worthwhile if you've connected your own laptop to an iffy hotspot.

When government representatives and business executives visit China or Russia, They leave all personal or company phones and laptops behind, using a new, blank loaner phone or laptop if necessary. It's an extreme step, but if you're not carrying any sensitive information there's nothing for a hacker to steal.

As you can see, there's a whole range of precautions you might take to keep an Internet café session from turning into an identity theft nightmare. If you're forced to use public computers for sensitive communication, consider using ransom-note passwords and possibly a VPN. Don't engage in any sensitive communication that you could just as well do from your home or office.

But even if you're doing nothing more than checking Facebook and emailing your dear auntie, do take the minimal precautions. Invoke the browser's privacy mode, or clear browsing data if you forgot. Doing so just takes a second and can save hours of aggravation.

## 10 Best Ways to save and improve your Laptop's Battery Life

1. You can use your laptop with removing battery from it too. Yes! your laptop can work directly from AC supply. When you are going to use your laptop for a long time at home try this method. This will help a lot to save your battery life as removing battery from laptop won't heat your battery anymore. But be careful if you have regular power cuts in your area.

2. Avoid using the DVD drive when you are in travel and if you want to use your laptop for maximum time.

3. Reduce the number of start-up programs. When you are about to travel with your laptop check your laptop's start-up applications once and remove unnecessary programs which run in background and eats your battery life.

Remove unnecessary start up programs to save your laptop battery

4. If you don't need wireless connections like Wi-Fi and Bluetooth immediately turn off them. Most of the laptops have a common switch for both Wi-Fi and Bluetooth. Although we use Wi-Fi regularly there is no use of Bluetooth. So check whether Bluetooth is turned on or not.

5. Using Headphones instead of laptop's speakers will give long battery life.

6. Some web applications like Skype, DropBox(or any other sync tool), GTalk etc. will run in

7. background always. Quit them or change their settings accordingly.

8. Don't plugin and leave your adapter turned on. This will increase the time to charge your laptop battery to 100%. I made this mistake and damaged my adapter. Now I bought a new adapter for my laptop and the time required to charge my battery to 100% has reduced significantly. So never plug-in and leave your adapter.

9. Web browsers consume most of the power after screen. So avoid using so many browsers at a time and close the tabs which you don't want to use.

10. If you are on Windows 7 then avoid using desktop gadgets. They will drain your battery life. Also if you are using any desktop customization softwares disable them

11. If you are a Windows user then check which power plan you are running on from the below list.

## COMPARISON BETWEEN DRAM AND MRAM

### Density

It is physically similar to DRAM in makeup, although often does not require a transistor for the write operation. However, as mentioned above, the most basic MRAM cell suffers from the half-select problem, which limits cell sizes to around 180 nm or more. Toggle-mode MRAM offers a much smaller size before this becomes a problem, apparently around 90 nm, the same size as most current DRAM products. To be worth putting into wide production, however, it is generally believed that MRAM will have to move to the 65 nm size of the most advanced memory devices, which will require the use of STT.

### Power consumption

Since the capacitors used in DRAM lose their charge over time, memory assemblies that use DRAM must refresh all the cells in their chips approximately 20 times a second, reading each one and re-writing its contents. As DRAM cells decrease in size, the refresh cycles become shorter, and the power-draw more continuous.

### Performance

DRAM performance is limited by the rate at which the charge stored in the cells can be drained (for reading) or stored (for writing). MRAM operation is based on measuring voltages rather than charges or currents, so there is less "settling time" needed. IBM researchers have demonstrated MRAM devices with access times on the order of 2 ns, somewhat better than even the most advanced DRAMs built on much newer processes. A team at the German Physikalisch-Technische Bundesanstalt have demonstrated MRAM devices with 1 ns settling times, better than the currently accepted theoretical limits for DRAM, although the demonstration was a single cell. The differences compared to flash are far more significant, with write times as much as thousands of times faster.

### Conclusion

MRAM has similar performance to SRAM, similar density of DRAM but much lower power consumption than DRAM, and is much faster and suffers no degradation over time in comparison to flash memory. It is this combination of features that some suggest make it the "universal memory", able to replace SRAM, DRAM, EEPROM, and flash. This also explains the huge amount of research being carried out into developing it.

MRAM is still largely "in development", and being produced on older non-critical fabs. The only commercial product widely available at this point is Everspin's 4 Mbit part, produced on a several-generations-old 180 nm process. As demand for flash continues to outstrip supply, it appears that it will be some time before a company can afford to "give up" one of their latest fabs for MRAM production. Even then, MRAM designs currently do not come close to flash in terms of cell size, even using the same fab.

## List Of Programming Languages

- |                       |                 |                   |                   |
|-----------------------|-----------------|-------------------|-------------------|
| 1. ABC                | 37. CSP         | 74. Lua           | 115. Sather       |
| 2. ACSL               | 38. cT          | 75. Lucid         | 116. Scheme       |
| 3. Ada                | 39. Curry       | 76. M             | 117. Self         |
| 4. Alef               | 40. Dylan       | 77. Magma         | 118. SETL         |
| 5. Algol              | 41. Dynace      | 78. Mathematica   | 119. sh           |
| 6. Algol68            | 42. Eiffel      | 79. Mawl          | 120. Simscript    |
| 7. APL                | 43. Elisp       | 80. Mercury       | 121. SIMULA       |
| 8. AppleScript        | 44. Erlang      | 81. Miranda       | 122. Sina         |
| 9. Autolt             | 45. Escher      | 82. ML            | 123. SISAL        |
| 10. Autolisp          | 46. Esterel     | 83. Modula 3      | 124. SLAM         |
| 11. Awk               | 47. Euphoria    | 84. Modula-2      | 125. Smalltalk    |
| 12. BASIC             | 48. FLoop       | 85. MUMPS         | 126. SML          |
| 13. BCPL              | 49. FORMAC      | 86. NESL          | 127. SNOBOL       |
| 14. Befunge           | 50. Forms/3     | 87. NIAL          | 128. SPARCL       |
| 15. BETA              | 51. Forth       | 88. Oberon        | 129. SPITBOL      |
| 16. BLISS             | 52. FORTRAN     | 89. Objective-C   | 130. T            |
| 17. BLoop             | 53. FP          | 90. Obliq         | 131. Tcl          |
| 18. C                 | 54. Goedel      | 91. occam         | 132. TECO         |
| 19. C#                | 55. GPSS        | 92. OPS5          | 133. Telescript   |
| 20. C*                | 56. Haskell     | 93. Orca          | 134. Terse        |
| 21. C++               | 57. Hope        | 94. Oz            | 135. TeX          |
| 22. Cecil             | 58. HyperTalk   | 95. Pascal        | 136. Theta        |
| 23. CFML              | 59. ICI         | 96. PerfectScript | 137. Turing       |
| 24. CHILL             | 60. Icon        | 97. Perl          | 138. UFO          |
| 25. Cilk              | 61. INTERCAL    | 98. PHP           | 139. Until        |
| 26. CLAIRE            | 62. Interlisp   | 99. Pict          | 140. VBScript     |
| 27. Clean             | 63. J           | 100. Pike         | 141. VHDL         |
| 28. CLU               | 64. Java        | 101. Pilot        | 142. Visual Basic |
| 29. CMS-2             | 65. JavaScript  | 102. PL/C         | 143. WordBasic    |
| 30. COBOL             | 66. Jovial      | 103. PL/I         | 144. xlsx         |
| 31. Common Lisp       | 67. Leda        | 104. Postscript   | 145. Yorick       |
| 32. Concurrent Clean  | 68. LIFE        | 105. Prolog       | 146. ZPL          |
| 33. Concurrent Pascal | 69. Limbo       | 106. Python       |                   |
| 34. CORAL 66          | 70. Lingo       | 107. QBasic       |                   |
| 35. CorelScript       | 71. Lisp        | 108. Quake-C      |                   |
| 36. csh               | 72. Logo        | 109. REBOL        |                   |
|                       | 73. LotusScript | 110. Reduce       |                   |
|                       |                 | 111. Rexx         |                   |
|                       |                 | 112. RPG          |                   |
|                       |                 | 113. Ruby         |                   |
|                       |                 | 114. S            |                   |

## Mobile Devices Will Outnumber Humans in 2012.

Machines might be taking over the world. Globally, mobile devices will outnumber humans this year, CISCO has predicted.

In its annual Global Mobile Data Traffic Forecast, Cisco looked at the state of worldwide mobile networks to reach some interesting conclusions.

CISCO said mobile data traffic more than doubled last year, increasing 133 percent. It said traffic will grow similarly in 2012, climbing 110 percent, and it will have increased 18-fold by 2016. By that year, over half of mobile traffic will come from Asia Pacific and Western Europe, with the biggest gains coming from the Middle East and Africa, where traffic will have increased 36 times over, Cisco said.

"Mobile data traffic will continue to explode," Cisco's vice president of service-provider marketing Suraj Shetty told Businessweek. "This is a trend we don't see slowing down."

CISCO attributes this growth to the ever-increasing selection of devices on the market. It said in the next five years, 15 percent of mobile users will own at least one connected device, and 9 percent will own three or more. By 2014, Cisco forecasts that handsets will comprise more than 50 percent of mobile data traffic.

Additionally, Android users are doing more to promote this traffic growth, consuming data at a rate 29 percent higher than iOS users. That said, the amount of data used by the average mobile user is on an upward path. Cisco said in five years, 60 percent of mobile users will be using more than a gigabyte of mobile data each month. Last year, only 0.5 percent did this. Cisco said in 2012, 100 million people will be using this much data.

In line with these predictions, CTIA said last fall that the number of wireless subscriber connections in the U.S. outnumbers the population. If CTIA's data is correct, that means there are more smartphones, tablets, and wireless gadgets in the states than there are people.

## World's first Laptop!!!!!!

This is Toshiba T1100, the world first Laptop for the whole market.  
This was manufactured in 1985.



**KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE**

Opp: Yerragattu Hillock, Vill: Bheemaram, Mandal: Hasanparthy, Warangal - 506 015, A.P.

Phone: 0870-2564888; Fax: 0870-2564320