

# Random Bytes

Volume 1, Issue 3

Spring, 2003

Computer Science Department  
College of Basic and Applied Sciences

## Untch Receives Award



Roland Untch has been awarded the "Innovations Award in Videoconferencing" granted by the TBR Distance Education Committee. The award was given on February 20, 2003 at the Seventh Annual Distance Learning Conference in Nashville, Tennessee. He is currently instructing the first interactive videoconferencing course over IP at MTSU for the Computer Science Department (Spring 2003). The par-

ticipating Tullahoma site is the University of Tennessee Space Institute (UTSI). Roland is keenly interested in developing synchronous distance education technology for use in teaching computer science. The long-term goal of this interest is to provide multicast desktop video-conferencing instruction to computer science graduate students. Because these students often have high bandwidth network access, innovative approaches in course development and delivery are being explored to reach this population. Dr. Roland H. Untch received the B.A. degree in management from Mundelein College (Loyola University Chicago), the M.S. degree in computer science from DePaul University and the Ph.D. in computer science from Clemson University. Prior to joining the faculty of MTSU in 1994, he taught at Clemson University and Purdue University Calumet.

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### Dates to Remember

- *Spring Evaluations - April 16-29*
- *Academic Awards Ceremony - April 24*
- *Final Exams - April 30 - May 6*
- *Graduation - May 10*
- *First Day of Summer Classes - May 12*

## New Faces

We were fortunate this semester to hire two new adjunct professors. Katrinka Sutton and Paige Youngkins are doing a great job teaching sections of Computer Orientation.

*Katrinka M. Sutton* received her Bachelor of Science degree from David Lipscomb University and her Masters degree from Belmont University. She



**Katrinka Sutton**

retired from Nashville State Tech. Katrinka walks three miles a day, is active in her church and assists elderly relatives. She enjoys reading but says she possesses a special skill in being a grandma! Katrinka is married and has two daughters and two grandchildren.

*Paige Youngkins* is a senior software engineer at Square D Company. She earned her Bachelor of Science in

### Paige Youngkins



electrical engineering from Tennessee Tech and her Ph.D. in physics from Texas Christian University. She is married and enjoys running, cooking and home improvement.

## The Internet at MTSU

By Richard Detmer



In 1991 Computer Science Professor Al Cripps received a National Science Foundation (NSF) grant

for a 56kbps link to the Internet via SURAnet (Southeastern Universities Research Association Network). Through Dr. Cripps' efforts MTSU received a class B address space, now virtually unobtainable. Originally MTSU reached the Internet via a leased phone link to Vanderbilt University.

Internet access has improved each year at MTSU. There are now several T1 lines connecting the campus to the world. The on-campus standard today is 100 Mbps switched Ethernet to the desktop, providing a full 100 Mbps dedicated connection to the campus data network. A gigabit switch provides even faster connections within the Computer Science Department itself.

In 2002 Dr. Richard Detmer, Computer Science Chairperson received another NSF grant, this time to provide MTSU with a high performance network connection. A high-speed connection to Abilene, the network that is the backbone for the Internet2 consortium, was established in February 2003. Abilene is a high-speed communications network separate from the "regular" Internet. The connection is the result of collaboration between MTSU departments, MTSU's Information Technology Division, and Vanderbilt University. Internet2 is a consortium being led by 200 universities working in partnership with industry and government to develop and deploy advanced network applications and technologies, accelerat-

ing the creation of tomorrow's Internet. Internet2 is recreating the partnership among academia, industry and government that fostered today's Internet in its infancy. The primary goals of Internet2 are to:

- Create a leading edge network capability for the national research community
- Enable revolutionary Internet applications
- Ensure the rapid transfer of new network services and applications to the broader Internet community

Generally, connectivity to Abilene is reserved for Internet2 members. Vanderbilt University is an Internet2 consortium member and has agreed to sponsor MTSU for connection to Internet2. Although MTSU will not initially be an Internet2 consortium member, the partnership with Vanderbilt will allow MTSU to have high-speed, 45-Mbps network access to all Internet2 institutions and their sponsored partners.

Four co-principal investigators on the new NSF grant will use the high performance network for their research efforts.

These are Dr. Ralph Butler (Computer Science), Dr. Ngee-Sing Chong (Chemistry), Dr. Preston J. MacDougal (Chemistry) and Dr. Zachary Sinkala (Mathematics).

As part of the proposal, the Information Technology Division created a network-engineering plan to integrate existing university network services with Internet2 connectivity.

Everyone on campus has access to the Internet2 network; it is not limited only to the projects identified for the NSF grant. While commercial Internet traffic is prohibited from using the Internet2 connection (Internet2 cannot be used as a backup for commercial Internet con-

nectivity), there are no mandated restrictions for traffic between connected Internet2 institutions.

Data travels on either the commercial Internet or Internet2 based on best performance calculations. This is automatic, not dependent on the application being used. End users will not see any difference between the commercial Internet and Internet2, only increased performance. By having a direct connection to Internet2 members and their sponsored partners, important research information can be exchanged between institutions with minimal delay and without the possibility of interference from commercial Internet-based hack attacks.

### Computer Chuckle



Jesus and Satan have a discussion as to who is the better programmer. This goes on for a few hours until they come to an agreement to hold a contest, with God as the judge.

They set themselves before their computers and begin. They type furiously, lines of code streaming up the screen, for several hours straight. Seconds before the end of the competition, a bolt of lightning strikes, taking out the electricity. Moments later, the power is restored, and God announces that the contest is over. He asks Satan to show what he has come up with.

Satan is visibly upset, and cries, "I have nothing. I lost it all when the power went out." "Very well, then," says God, "let us see if Jesus fared any better." Jesus enters a command, and the screen comes to life in vivid display, the voices of an angelic choir pour forth from the speakers.

Satan is astonished. He stutters, "B-b-but how?! I lost everything, yet Jesus' program is intact! How did he do it?"

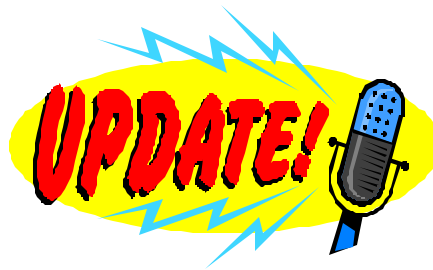
God chuckles, "Everybody knows...Jesus saves."

## Faculty Updates

*Joe Driscoll* entered the Faculty Leadership Academy this semester (Class of 2003). The purpose of the Academy is to develop and enhance the leadership potential of faculty who will be carrying MTSU's academic programs and Academic Master Plan into the next decade.

*Roland Untch* recently published an article titled, "Can fault-exposure-potential estimates improve the fault detection abilities of test suites?" by Wei Chen, Roland H. Untch, Gregg Rothermel, Sebastian Elbaum, Jeffery von Ronne in the *Journal of Software Testing, Verification, and Reliability*, volume 12, issue 4, (December 2002), pages 197-218.

*Richard Detmer* attended the 2003 Chairpersons Conference in Orlando, Florida February 5-7, 2003.

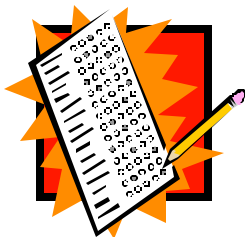


*Jungsoon Yoo* presented a paper titled, "An Adaptive Stock Tracker for Personalized Trading Advice" at the 2003 International Conference on Intelligent User Interfaces in Miami, Florida January 12-15, 2003. She was assisted by Sung Yoo as he presented a demonstration titled, "Personalized Trading Recommendation System."

*Brenda Parker* and *Chrisila Pettey* presented a paper coauthored with *Judy Hankins*, *Ginger Rowell*, *Judith Iriarte-Gross* and *Diane Perhac*, titled, "Computer-Related Gender Differences," at the 2003 SIGCSE (Special Interest Group on Computer Science Education) Technical Symposium in Reno, Nevada February 19-22, 2003. The conference was sponsored by ACM (The Association for Computer Machinery) and SIGCSE.

*Judy Hankins*, *Brenda Parker* and *Sung Yoo* were recognized as faculty members who significantly contributed to the success of the past fall's graduating students at MTSU.

## CSCI Wizard



### ... Test your knowledge of the CSCI Department

Tests—easy to give, not so easy to take! The questions below all concern the Computer Science Department faculty and staff. Answer as many questions as you can. Take as long as you need. (The answers are on page 4 but remember, cheaters will be prosecuted!) Grade your test according to the chart at the right.

1. What class is Joe Driscoll taking this semester?
2. Where is Sung & Jungoon's son, Jeff, spending the semester as an exchange student?
3. What new home project is Richard working on?
4. Whose daughter was chosen as homecoming class representative for this year?
5. Who has joined a bowling league this semester?
6. What recreation did Al's girls enjoy doing this very cold winter?
7. Whose son was recently accepted into honors school and has an intense interest in space?
8. What does Chrisila's husband plan to do when he retires from teaching in a few years?
9. What is Brenda's granddaughter's name?
10. Who does Dianne's son have an internship with for this summer?
11. Which "doctor" has been nurse at home to their son and mother?
12. Who has been in the Computer Science Department the longest?
13. What grade is Cen's daughter in?
14. Who runs a taxi service from Birmingham to Murfreesboro?
15. Who has their pilot's license?

### Scoring Chart

**Perfect Score - SUPER!**  
We really are your second family!

**14-10 Correct - GOOD!**  
See, those conversations in the hall paid off!

**9-6 Correct - NOT BAD—**  
But you might consider having lunch with some of your co-workers this week!

**5 or Below Correct - Open your office door!** There's life out there!

P. O. Box 48  
1500 Greenland Drive  
Murfreesboro, TN 37132

Phone: (615) 898-2397  
Fax: (615) 898-5567



Editor: Dianne White  
Editorial Assistant: Michelle Higdon



April 2003						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

May 2003						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

April 1	UPE Initiation Dinner
April 3	Departmental Meeting & Birthday Lunch
April 11	Comps
April 15	ACM Meeting
April 17	Departmental Meeting
April 18	Holiday—No classes
April 24	Academic Awards Ceremony
April 29	Last Day of Classes
April 30-May 6	Exams
May 10	Graduation
May 12	Summer Classes Begin
May 26	Holiday—No Classes

### Answers to the CSCI Wizard

1. Biology
2. Spain
3. His bathroom
4. Michelle's
5. Neal
6. Ice Skating
7. Medha
8. Woodworking
9. Cala
10. The Titans
11. Judy
12. Mack
13. First
14. Suk
15. Ralph

### UPCOMING ACM MEETINGS

#### .NET User Group Meeting

Tuesday, April 8<sup>th</sup>, 12:30 to 1:30 P.M. KOM 452  
Sponsored by the MTSU ACM Chapter



#### Microsoft Visual Studio.Net 2003 Campus Tour

Monday, April 14<sup>th</sup>, 6:00 P.M. to 7:30 P.M.  
(Registration starts at 5:00 p.m. or [you can register online](#) before the tour)  
**Location:** MTSU Tucker Theatre

#### Human Robot Implicit Communication"

Dr. Nilanjan Sarkar, Vanderbilt University  
Tuesday, April 15<sup>th</sup>, 12:30-1:20 P.M. KOM 360