TSM

SPOTLIGHT

Masaru Okuda

Masaru Okuda joined MSU as a TSM lecturer in January of 2006, after TSM faculty met him at the ITERA conference the year before. Masaru received his bachelor's from Brigham Young University in Hawaii in information systems and computer science. He has his master's and is scheduled to receive his Ph.D. in August 2006 from University of Pittsburg in information systems/telecommunications. Before coming to Murray State, he worked in a software engineering group designing and developing high-speed network switches for AT&T.

Okuda has research interests in multimedia application support over the internet, peer-to-peer networking, and quality of service support.

Okuda, also known as "Vic" because Masaru means victory, is originally from Tokyo, Japan. While away from work, Okuda enjoys his hobby of photography.

Marcia Combs

Marcia Combs came back to MSU in 2004 as a student and graduated with her MS in TSM in 2005. In 2006, she was appointed the position of lecturer and special projects. Combs previously had received her bachelor's in computer engineering technology at Murray State.
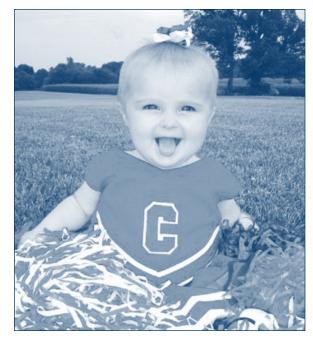
Originally from Fort Bragg, N.C., Combs was an army brat and traveled frequently with her family. She decided to return to MSU for several reasons including Dr. Weber and Dr. Claiborne's leadership and direction with the TSM program. She now works on projects such as the Bluebird Project where a family of birds is on a live feed to schools so that students can observe the birds birthing and feeding behaviors. Combs is also an important part of the CyberCave Academies and field trips for high school students. Her favorite class to teach is Protocol Analysis.

When she is not at work, Combs enjoys the outdoors by camping, kayaking and biking. Combs' quote to live by is from the famous Gene Simmons' mother: "Every day above ground is a good day."

Mark your calendars

- Women In Telecom Golf Day Sept. 28, 2006

- Homecoming Oct. 12-14, 2006

- 2007 ITERA Conference in Las Vegas March 18-19, 2007

- Patterns of Distinction-Global Telecommunications April 19, 2007

- TSM Awards Banquet April 19, 2007

Freeze Frame

Our Newest Addition:

Sayde Lane Lowe
12-14-05
6 lbs. 14 oz.
Parents Scott and Shea Lowe

Telecommunications
Systems Management

The Director's Chair

The TSM program at Murray State is a Program of Distinction. When the TSM program was established in the late '90s, the goal was to establish a program that would gain national recognition. Over the last semester we have made significant progress toward reaching the goal of a nationally recognized program.

In April we held our first "Patterns of Distinction" forum on Entrepreneurship in Telecommunications. This event brought together speakers from across the country. The success of this first forum has led to a decision to hold another forum next April. The next "Patterns of Distinction" will deal with global telecommunications. Hold this date – April 19, 2007. We want to see you!

Another way that the TSM program has elevated its stature is the creation of three awards and the first TSM Awards Banquet. Check out the article about the banquet to get the details of the awards given out this year. Our intent is to present these awards each year so we are looking for nominations for the awards in 2007. Do you know someone that fits one of our three awards? Watch our website and your email for the nomination process. We want your nominations!

Our Master of Science (MS) in TSM goes online this fall. This will allow students to take our classes from anywhere, via the internet. Another great development about our MS is that it will be offered on the island of Cyprus starting in December. We'll update you as the programs get running in Cyprus. Do you have your master's? If you don't, then we might have the program for you. Check out our website!

We added two new faculty members in January. We are very lucky to have Marcia Combs and Masaru Okuda added to our faculty. To get more information about these two new faculty members, see the spotlights. We have great faculty!

The International Telecommunications Educational and Research Association (ITERA) has taken a big part of our time over the last six months. The first ITERA conference was held in March. Dr. Gary Brockway, MSU provost, and Dr. Phil Sparks, former director of the Center for TSM, were recognized at the conference as the recipients of the first ITERA Leadership in Telecommunications. This award recognizes their individual roles in creation of the MSU TSM program and the resulting role of the MSU TSM program in the creation of ITERA. We are proud of Drs. Brockway and Sparks!

We have had some changes in personnel within the Center for TSM. Check out the Freeze Frame to see Sayde Lane Lowe and see why Shea has decided to be a full-time mother. Shea has touched many students, faculty and company contacts over the last few years. We will miss Shea but we know that being a full-time mother is very important to her and we all wish her well. We look forward to watching Sayde grow and maybe we'll see her soon as a TSM major. Our new addition is Dana (Starnes) Howard. Dana has worked in the Center part time since last fall, but is now a full-time employee. Dana has taken the lead in editing the *Convergence*, organizing the CyberCave, visiting schools, and coming up with new ideas like the Women in Telecommunications Golf Day (see the Mark Your Calendars section). She is very busy!

We are on the move and many positive things are happening to make us a Program of Distinction!

Jim Gantt

"Patterns of Distinction" pulls students, faculty, industry and government together

"Patterns of Distinction", a forum on Entrepreneurship in Telecommunications, was held for the first time in the IT Building on April 6, 2006, a special day for Murray State and the TSM program. The full day event was hosted by our own Program of Distinction in TSM, The Kentucky World Trade Center, The MSU Regional Business and Innovation Center (RBIC) and ConnectKentucky. The four sponsors worked together to create an all-star lineup including speakers such as John Williams of Computer Services Inc, Gov. Martha Layne Collins, and Brian Mefford of ConnectKentucky. With 156 people registered for the forum, there were a variety of MSU students, MSU faculty and staff and industry or government officials representing nine states from across the U.S.

Senator Bob Jackson, director of gift planning at MSU, was very pleased with the forum, which he helped create through his work with the Kentucky World Trade Center. "The Patterns of Distinction Conference allowed Murray State University to not only showcase our TSM Program, but it brought some of the best technical minds in the country to our campus. Mr. John Williams and Dr. Gene Wells Ray are national leaders in the telecommunications and computer services fields and it is an honor to have them at Murray Sate University for this conference."

TSM students had the opportunity to network with several important individuals in the telecom field and hear from them about their experiences in the industry. MSU faculty, along with other industry leaders from the area, wrapped the day up with presentations leading to a reception at the new MSU RBIC.

Guests of the "Patterns of Distinction" also had several chances during the day to walk outside to the Nortel NetworksExpress Briefing Center. The Briefing Center is a large semi-trailer truck that is sent all over the U.S. The sides of the semi expand to open a large walk- through exhibit of Nortel networking technology.

"Patterns of Distinction" is already in the planning stages for April of 2007 and will have a theme of Global Telecommunications.

Convergence

NAB is proud of TSM program

The TSM National Advisory Board (NAB) held their annual meeting this year on April 6 and 7, during the Patterns of Distinction Forum. The nine members present at the meeting were John Abel from USTA, Cynthia Brumfield from Emerging Media Dynamics Inc., Dr. Gene Wells Ray, founder of Titan Corporation, Dick Anderson of Bellsouth, Kent Bohanon from State Farm Insurance, Bob Du Charme from Cisco, James Graham from the University of Louisville Telecom Research Center, entrepreneur Michael Hegeman, Linda Johnson from Bowling Green, Ky., and filling in for Steven Powless was John A. Williams of CSI. The group was given an overview of the TSM program and its progress over the past couple of years, including new TSM faculty and staff members and a demonstration of software that might be used with the new online TSM master's program starting this fall. During the meeting, a decision to build a new video conferencing room for the master's program was decided on and the NAB was shown a sketch of what the new room, sponsored by Dick Anderson of BellSouth, will look like. All of the observers were very pleased with the program's progress and were excited about the possibilities for adding on to the master's program. Cynthia Brumfield left with the comment "I was impressed last year with the program, but now I am even more impressed with the professionalism of the staff and faculty because everything is always high quality. The dedication is tremendous." The NAB plans on meeting again during Patterns of Distinction 2007 with possible additions to the group.

John A. Williams of CSI

http://www.murraystate.edu/tsm

First Ever TSM Awards Banquet

The TSM program hosted its first TSM Awards Banquet on April 6, 2006. Over 100 guests including political figures, industry leaders, Murray State faculty, staff and students joined together for a night of recognition. During the dinner, plaques representing three very important people for MSU and the telecommunications industry were unveiled and awards were given to an outstanding undergraduate student, graduate student and online student. The three main awards are named after the first recipients.

The first award, presented by Provost Gary Brockway, was the Gene Wells Ray Telecommunications Systems Management Lifetime Achievement Award. This award was created for individuals that have exhibited a significant, sustained contribution to TSM over their career, such as Dr. Gene Wells Ray has done. Ray, alumnus of Murray State, founded the Titan Corporation in 1981. The Titan Corporation, now part of L-3 Communications, was a leading provider of comprehensive information and communications products, solutions and services for the National Security Agency and the Department of Homeland Security, the Department of Defense, intelligence agencies and other government customers. Ray and the Titan Corporation have also had a large hand in helping to create our CyberCave.

The second award, presented by Board of Regents President Don Sparks, was the Dick Anderson Telecommunications Systems Management Leadership Award. This award was created for individuals that have made a significant contribution

to TSM by their leadership, technical and/or management skills. Dick Anderson is the current vice chairman and president of Business Markets at BellSouth. After graduating at Murray State, Anderson joined South Central Bell as an account executive and has held several different positions within BellSouth since. Anderson has helped to secure a relationship between MSU TSM and BellSouth through contributions and sponsorship of several things including our upcoming Dick Anderson TSM Master's Classroom which will create a platform for distance learning.

The third award, presented by Gov. Martha Layne Collins, was the John Williams Telecommunications Systems Management Entrepreneurship Award. This award was created for individuals or companies that have started a TSM related company or significantly expanded an operation in Kentucky or the MSU service area. John Williams is the current chairman of the CSI Board of Directors. He is the founder and former president of the Association of Financial Technology and has been appointed to serve on several Governor's Commisions ranging from economic development to science and technology. As a founder of Computer Services Inc. in Paducah, he has led several other community projects, and maintained a long-term relationship with the MSU TSM program.

The three beautiful glass plaques recognizing the winners of the awards will be located in the IT building next to the Center for TSM. The Second Annual TSM Awards Banquet will be held on April 19, 2007, in the Curris Center Ballroom.

Gene Wells Ray accepting award from Dr. Brockway

Dick Anderson with father Cecil Anderson

John Williams

2006 Student Awards

Outstanding Undergraduate Student – *Brandon Kindle*

Outstanding On-Line Student – *Vicky Hardin*

100th Undergraduate Graduate – *Jaime Miller*

Outstanding Graduate Student – *Charles Moore*

CONFERENCES IN 2006

The 2006 ITERA conference was held at Mandalay Bay in Las Vegas, Nev.

TSM graduate student Ritesh Agrawal speaks at the 2006 ITERA conference

Murray State has good representation at ITERA conference

Twenty faculty, staff and students, including Provost Gary Brockway, represented MSU at the 2006 ITERA conference in Las Vegas, Nev., this past March. One of those students, James Copeland, was asked by TSM staff to assist ITERA board members with an assortment of tasks. The ITERA conference is a part of the United States Telecom Association (USTA) conference TelecomNEXT, held each year in Las Vegas. Through the USTA conference, Copeland and other students had the chance to network with leading telecom industries, and possible employers, from all over the U.S.

Copeland believes this is an experience every student should get to participate in. "Events and conferences as this are helpful to students and professionals alike to get a taste of the research being conducted by companies and to see what kind of students companies are looking to employ. It is a way to see if you are on the cutting-edge or the cutting-room floor."

The ITERA educational conference included submitted papers from the 12 member universities and other universities who wanted to get involved. Students and faculty had a total of 49 presentations, 10 of which were by MSU faculty and students, during the two-day conference. The conference was broken up into sections of topics including network planning and design, telecom

policy and law, e-commerce and telecom management, economics, pedagogical issues, and telecom technology.

Murray State was also highlighted during the First ITERA Awards Banquet, held the first night of the conference. During the banquet, MSU Provost Dr. Brockway and previous CTSM director, Phil Sparks were presented with a Distinguished Service Award from Itera. Brockway and Sparks were instrumental in starting and building the Program of Distinction in TSM to the level of success and recognition it has today.

Inside the USTA exhibit hall, ITERA member schools such as MSU handed out a "Student Resource CD." The 300 disks handed out included an electronic description of ITERA, a description of each member school's telecommunications program and curriculum, and PDF resumes of each school's students available for internships and jobs within the next year.

The 2007 ITERA conference, in conjunction with the USTA conference, is scheduled for March 18-19, 2007, at the Venetian Hotel in Las Vegas, Nev. A call for papers will be in early fall and can be submitted to Dr. Terry Holmes in Business and Public Affairs.

Find out more about **ITERA** at **http://www.itera.org**

TSM student Mitchum Owen wins the MSU Outstanding Senior Man Award

Mitchum Lee Owen, from Paris, Tenn., has a degree in electronic media and a minor in TSM and business administration. As a TSM student, Owen conducted undergraduate research in conjunction with the McNair program titled, "An Analysis of End-User Configurations Used for Internet Access." This project used JavaScript, PHP, and mySQL to collect basic information about the types of configurations used to access various websites. This information allows web designers to create content that will perform well on the systems used to access their sites. The project was presented by Owen at the 2006 ITERA conference in Las Vegas this past March and at the Kentucky Honors Roundtable.

At the May 2006 Graduation, Owen delivered one of the two student speeches. His speech included the important lessons all the graduates have learned during their tenure at MSU including working hard, networking with others, giving back to the community, and most of all taking time to have fun.

Now out of college, Owen plans on completing a summer internship and starting graduate work this fall at Indiana

University-Purdue University at Indianapolis (IUPUI). He will be working on a master's of science in media arts and science. His studies will include several areas of new media like web design, programming, animation, video and audio.

From your friends at the Center for TSM, CONGRATULATIONS MITCHUM!!

Student and Faculty Projects

Class builds Wireless Network

Two classes in the TSM program, TSM 321 and TSM 322 worked on a very special project this last year. Based on CDMA technology, students got to build their own mobile cellular communication system. Coverage was possible throughout the campus, but it was intentionally limited to in-building coverage. The equipment used for this wireless network is from Alvarion Company through funding from Titan Corporation to the TSM program. For the students to get hands on experience, they designed the mobile wireless system and then worked on optimization applications. With guidance from faculty, the system became a small scale version of the Verizon mobile wireless networks. To find out more about the wireless option for TSM students, contact Dr. Yarali at abdul.yarali@murraystate.edu

Faculty member and grad student write paper for Australia conference

This past year, Dr. Abdul Yarali along with MSU graduate student and BellSouth employee, Ann Cherry, wrote a paper entitled Internet Protocol Television (IPTV), which was selected for presentation at the IEEE conference in Australia last November. Cherry had written the research paper for Yarali as part of her TSM 610 course requirements. Together, they prepared the final paper and submitted it for peer-review at the conference and publication. The paper focuses on the idea that TV is now going through the trend of being digitized and "packetized," much like voice has done over the last generation. Yarali and Cherry feel that this will provide a more function-rich, user-interaction form of TV to the consumer and phone companies will quickly embrace this new technology. The paper also gives in-depth reasoning to why they feel IPTV has so many benefits by comparing it to several other technologies such as the current Cable TV architecture.