



IEEE Crosstalk



The Monthly Newsletter of the Mid-Hudson Section of the IEEE

Volume XLI, No 4, November 2002

Chairman's Corner

In this issue you can find a number of points of interest. Most of these are highlighted in the "Upcoming Events" section below. Be sure to look at the nominations for the 2003 Mid-Hudson Section officers.

We are always looking for volunteers to help run our organization. Our section has several open positions, including a Membership Chair, a Librarian, an Historian, a Corporate Relations Chair, a Life Members representative, and a representative for Graduates of the Last Decade. If you are interested in volunteering for any of these positions, or just want to get involved, please contact one of our officers listed to the right.

Our Vice-Chair, Casimer DeCusatis has graciously volunteered to video tape the monthly meetings whenever the speakers agree. His first taping was for the October meeting at SUNY New Paltz, where Casimer himself gave a talk on "Fiber Optics and the Future of the Computing Industry: Technology, Trends and Directions." If you are interested in viewing this or any future tapes, please contact decusat@us.ibm.com

Dr. Jean R.S. Blair, Chair
Jean.Blair@usma.edu

Upcoming Events

Mid-Hudson Section Officer Elections: At the December meeting we will vote on the slate of officers recommended by the nomination committee. If you have any objections or additional nominations, contact Barry-Shoop@usma.edu The nominations are as follows:

Chairperson: Dr. Jean R. S. Blair
Vice-Chairperson: Dr. Casimer M. DeCusatis Jr.
Treasurer: Mr. David J. Dittmann II
Secretary: Dr. Robert W. Sadowski
Members at Large: Mr. Larry J. Prescott, Mr. Lawrence J. Boland, and Dr. James Loy

December 11, 2002: LTC Dan Ragsdale from the USMA to talk about "Developing Software in Support of Operational Assessment in Afghanistan." See inside for the meeting notice.

January 2003: Dr. David Meltzer from ERDNY to talk on "The Challenges of High Speed CMOS Communication Chip Design in a Low Power Digital Process at ERDNY" and Dr. Seiki Ogura from Halo LSI, Inc. to talk on "Non-Volatile Memory Design and Technology. See inside for the meeting notice.

February 18, 2003: National Engineer's Week Banquet to be held at the Holiday Inn in Fishkill. Speakers will be geared toward high school and college students, as well as professionals from a variety of areas. Save the date. Watch our website for additional information.

Mid-Hudson Section Leadership

Chair: Jean R.S. Blair
Immediate Past Chair: William F. McCarthy
Vice-Chair: Casimer M. DeCusatis Jr.
Treasurer: David J. Dittmann, II
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Electron Devices Society: Michael Hargrove
Computer Society: Paul S. Basile
Education Society:

Mid-Hudson Section Website

<http://www.ewh.ieee.org/r1/mid-hudson/index.htm>

Mid-Hudson Section General Contact

Jean.Blair@usma.edu (845) 938-5003

December Meeting: Developing Software in Support of Operational Assessment in Afghanistan

Co-Sponsored with Mid-Hudson Chapter Computer Society

CONTACT: Jean Blair
Mid-Hudson Section Chair, <mailto:Jean.Blair@usma.edu>
DATE: Wednesday, December 11th, 2002
TIME: 7:30 PM
LOCATION: Room 144, Thayer Hall, West Point, New York
SPEAKER: Lieutenant Colonel Dan Ragsdale, United States Military Academy

ABSTRACT: To help set the stage for the software development process described here, we will begin with a brief overview of the role of the US Military as a part of the coalition forces in Afghanistan for the past, present and future. As will be described, our role has evolved into that of helping to establish and maintain a stable and secure environment in which international terrorist organizations can no longer flourish.

Within this context, we will describe an on-going software development project begun in July 2002 whose goal was to establish an automated, distributed process for conducting operational assessments, while adding the ability to easily aggregate collective assessments into a single cohesive view of progress made toward one or more overarching goals. The software system has added structure and rigor to the seemingly disjoint assessment processes in such a way as to allow a commander to better understand the relative progress towards completion of the various subtasks and the likely impact of that progress on reaching the overall desired end-state. A planned future development is the application of this methodology to non-military applications..

SPEAKER BIO: LTC Dan Ragsdale is director of the Information Technology and Operations Center (ITOC) at the US Military Academy (USMA) at West Point, NY. He has over twenty years of military and information technology experience, including six years in the area of information assurance (IA).

His military assignments include tours of duty with the 82nd Airborne Division, the 5th Ranger Training Battalion, and the 18th Airborne Corps. In 1983 Lt. Colonel Ragsdale took part in Operation *Urgent Fury* in Grenada, where he served as a platoon leader in the 2nd Battalion 505th Infantry. This past summer Lt. Colonel Ragsdale participated in Operation *Enduring Freedom* in Afghanistan, where he served as the Chief of Assessment for the Combine and Joint Task Force (CJTF -180).

Lt. Colonel Ragsdale's work in information technology arena began in 1990 when he served as research analyst in the Office of Artificial Intelligence at the US Military Academy. This was followed by a tour of duty as the deputy project manager for the US Army Corps/Theater ADP Service Center. Later, Lt Colonel Ragsdale served as a project officer in support of the Defense Advanced Research Projects Agency (DARPA) in the Advanced Distributed Simulation Program Office.

Following completion of his Ph.D. course work at Texas A&M in 1999, LTC Ragsdale was assigned the USMA Information Technology and Operations Center (ITOC). He first served as the Senior Research Scientist and was later promoted to the director of the center, a position which he has held for the past 18 months.

He has published numerous articles on IA topics. In addition, he has been frequent speaker and panelist at national IA conferences. Lt. Colonel Ragsdale's current research interests include information assurance, network security, intrusion detection, and artificial intelligence.

DIRECTIONS: Allow extra time to go through security at the gates of West Point. The public will need to enter West Point through either the Thayer Gate entrance or the Stoney Lonesome entrance. Thayer Gate is at the north end of West Point Highway in Highland Falls. Inside the gate you will need to enter the lane marked "Non-DOD Decal" to go through security. Ask the MP's how you get to Thayer Hall. There is parking on top of Thayer Hall. The talk will be given at the north end of the 1st floor of the building.

From the south, take 9W north and exit at the Highland Falls Exit. Follow the West Point Highway to the north end where you will find Thayer Gate entrance to West Point.

From the north, take 9W south past the 218/293 exit to West Point. Turn right at the next overpass onto 218. Turn right immediately after crossing the overpass. Stay on this road for about 1.4 miles, until you get to a stop sign at the bottom of the hill. Continue straight at the stop sign. Turn right onto West Point Highway. Thayer Gate is at the north end of this street.

The Public is Invited

January Meeting: Two Talks on Communication Chip Design and Memory Design

Co-Sponsored with Mid-Hudson Chapter Electron Devices Society

CONTACT: Michael Hargrove
Electron Devices Chapter Chair, Mid-Hudson Section mhargrove@erd.epson.com

DATE: Thursday, January 30th, 2003

TIME: 7:30 PM

LOCATION: Best Western Inn and Conference Center
Route 9
Poughkeepsie, NY

SPEAKERS: Dr. David Meltzer, Epson Research and Development Corporation, NY
Dr. Seiki Ogura, Halo LSI, Inc., Wappingers Falls, NY

ABSTRACTS: The Challenges of High Speed CMOS Communication Chip Design in a Low Power Digital Process at ERDNY. The Seiko Epson Corporation has a large and ongoing investment in semi-conductor chip fabrication, including several fabs in Japan. All are engineered to produce low power products for the mobile and timing product markets. The Epson Research and Development Corporation's New York laboratory (ERDNY) was established to design high speed products to be produced in these fabs and in advanced processes now under development. David Meltzer will discuss the history of their Lab and some of our ongoing projects. He will also highlight some of the challenges in integrating the manufacture of high speed products into a factory oriented toward the production of low speed, low power devices.

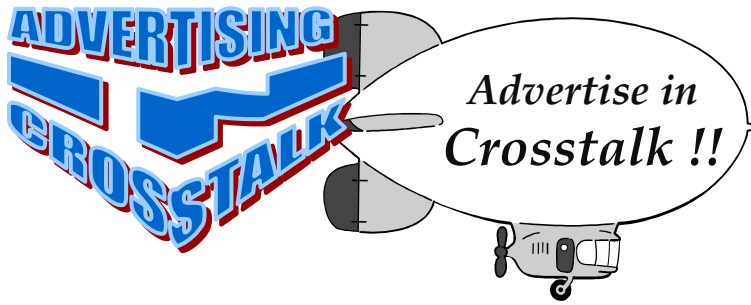
Halo LSI, Inc.: Non-Volatile Memory Design and Technology. Traditional non-volatile memory was primarily used in low density and slow EPROM/EEPROM forms, as BIAS chips in computer systems. Between 1980 to 1996, there was very little progress in flash memory technology. In recent years however, the demand for non-volatile memory has been rapidly increasing with the expansion of the portable consumer electronics market. Flash memory standards such as compact flash (TM), smart media (TM) and memory stick (TM), port data between digital cameras, PDA's, MP3 players, and future household appliances. In order to address the new requirements, many types of technologies have emerged. This talk will serve as an introduction to the various kinds of flash memory including Halo LSI's own proprietary Twin MONOS technology.

SPEAKER BIOS: David Meltzer (S'70-M'71-SM'98) received the B.E.E. degree from Rensselaer Polytechnic Institute, Troy, NY, and the M.S. and Ph.D. degrees from The Ohio State University, Columbus, all in electrical engineering. He is currently with the Epson Research and Development Corporation's New York laboratory working on custom CMOS IC designs for high speed clocking and serial communications. Prior to this he was a Research Staff Member in the VLSI Systems Group at the IBM T. J. Watson Research Center, Yorktown Heights, NY and at the IBM Austin Research Laboratory. His research interests centered on the design of high-frequency microprocessors and ultra low power DSPs, especially the interaction among circuits, instruction sets, and microarchitectures. He joined IBM in the Poughkeepsie, NY, product development laboratory and worked on the logic design, microarchitecture, performance, and instruction set architecture of bipolar and CMOS mainframe computers prior to joining the IBM Research Division. He received the IBM Seventh level invention achievement award and has co-authored 12 refereed journal or conference papers. He is a Senior Member of IEEE.

Dr. Seiki Ogura is the founder and president of Halo LSI, Inc. The company is located in Wappingers Falls, NY and focuses on development and licensing of its flash memory. Prior to his current position, he worked as a technologist at IBM for twenty five years. He and his group made several contributions to CMOS technology development, some of which are: lightly doped drain FET's, sidewall spacer technique, shallow trench isolation, and damascene metal processing. He is an IEEE fellow and recipient of the Morris Liebman award. He has also been an advisor to the European Consortium for the ULTRA/ESPIRIT projects to develop 0.18um/0.1um technology in Europe

DIRECTIONS: The Best Western is just north of the Poughkeepsie Galleria Shopping Center on Rt. 9. It is on the east side (right side) of Rt. 9 heading north.

The Public is Invited



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