

EE

Electrical Engineering NEWSLETTER

Fall 2004

CHAIR'S CORNER

Mesut Muslu

I would like to begin wishing you a wonderful fall season. I am hoping to see many of you at the homecoming on Saturday Oct. 9th. Keep in mind that the homecoming dinner and golf tournament are on Friday.

There are a couple of exciting developments that I would like to inform you about. The first one is called "Tri-State Initiative" in which UWP is planning to increase its student population by 2,000 (engineering by 1,000) by attracting students from Illinois and Iowa over a period of 7 years. First 200 students are expected to be on campus in Fall 2005. With this initiative, the plans are moving forward to build a new engineering building. The current plan is that when the new building is completed, the EE Department will move into the new building. We are looking forward to the new building with new laboratory facilities, classrooms, and offices for EE.

The second development is called the "Rock County Initiative". With this initiative, we are planning to offer EE courses in Janesville. This will be very similar to the "Fox Valley Program" that Mechanical Engineering program is offering at Fox Valley. The program aims to attract technical people who work at industry and want to receive an EE degree by taking courses late in the afternoon or evenings in Janesville. We have requested additional funding from UW System for this initiative. We are optimistic that it will be funded at this budget cycle.

In the last newsletter, I have indicated that we have a group of enthusiastic students and faculty to build an autonomous tour-guide robot. The team is working hard to put the system together and is expecting to test the system soon. I want to thank some of you who were instrumental in getting a company to donate some equipment for this project.

I hope that you all have received your copy of the EE alumni directory. It was a significant effort by Rose Durni, our program assistant. I certainly appreciated her time and effort on this. Thank you Rose. Please keep in mind that you may always update your information by

visiting the web site: <http://www.uwplatt.edu/ee/alumni.htm> and filling out the survey. The updated information will be on the alumni directory in the next cycle.

Thank you for your visits, emails, and phone calls. It is always great to hear from you.

News Items

Greetings Everyone!!

Hi this is your program assistant speaking Rose Durni. My summer was pretty uneventful, no trips this year, just some days off to go here and there with the old car bunch we chum around with. Yep, we have an old car – a 1970 Buick Electra Convertible (actually it's a BOAT) but love cuzn in it. If you are back for homecoming, no doubt it will be in the parade. So look for us! Also if you are around on Friday, October 8 for homecoming, please stop in the EE Office (171 Otts) and introduce yourself, I always enjoy meeting new people! Hope your summer was spent traveling, with family, friends and just pure enjoyment.

Let me tell you about the 3rd annual EE faculty/student "picnic". It had to be held indoors, due to rain, so our "outside games" were void. I will share pictures of those present and of course, what else but EATING. Food was furnished by IEEE and HKN as well as the faculty. We had the EE music "trio" this year. Phil Sealy on banjo, Dave Drury on guitar, and Xiaomin Kou on harmonica.



Scholarship awards were passed out and pictures taken of the happy recipients.

College of EMS Scholarships

<u>Recipients</u>	<u>Scholarship</u>
Anthony Gregerson	Ward Beetham
Mathew Hedlund	Ward Beetham
Andrew Owen	George Dobson
Deborah Cottrill	John Deere Dubuque Works
Lisa Dassow	John Deere Dubuque Works
Kevin Riederer	Robert A. Tintsman
Mark Panzer	Carl Veit
Anthony Gregerson	Arthur J. Cooke

Electrical Engineering Scholarships

Ryan Laspa	Arthur J. Cooke
Heidi Mikulsky	WI Energy Corp
Crystal Imhof	WI Energy Corp
Mark Panzer	EE Commemorative
Matthew Hedlund	Gray Family
Andrew Owen	Gray Family
Michael Potts	John Abraham Cleven
Steven Oliver	John Abraham Cleven
Jason Howser	John Abraham Cleven
Brendan McGovern	John Abraham Cleven
John Henkel	F. H. Russell
August Hammer	IEEE Student Chapter
Bart Grinwald	IEEE Endowed
Deborah Cottrill	WI Public Service Corp
Heidi Mikulsky	WI Public Service Corp
Bart Grinwald	Leon Charles Thevenin
Hans Christiansen	Exelon
Rikki Green	Exelon

CONGRATULATIONS TO ALL!

May/August 2004 Graduates

We had a large number of students that graduated in May/August this year and many had jobs before leaving Platteville. Some got married, and some even returned to UWP for MORE schooling. Graduates are: Melvin Aguirre, Lee Bergler, Kristin Bergler, Jeanne Edwards, Jessica Erickson, Dominic Hanson, John Harenke, Brandon Heath, Robert Kreger, Benjamin Lochner, David McGraw, Christopher Mills, Sarah Newton, Peter Ngan, Teerapong Orankitanun, Anthony Rosensprung, Robert Roth, Jeremy Schaefer, Anthony Schnulle, Joshua Schroeder, John Steenberg, Bruce Venne, Kurtis Verheyen, Michael Wavrunek, Jason, Wijas, Roger Wyssbrod. We wish all graduates continued success in their endeavors. And hope that all our EEs will keep in touch via e-mail, phone or a visit!

IEEE News

This year the IEEE student branch started a little slow, but is quickly gaining speed. Our elected President from last year, Crystal Imhof, received a last minute Co-Op

she could not turn down. Dan Janetski, elected Vice President took over Crystal's role and we had elections at our first meeting for a new Vice President. Rich Vedvik won the spot and has been doing a great job contacting speakers. We have a meeting planned for the second week in October and several new speakers lined up for the remainder of the year thanks to Rich's networking skills at the job fair. Rikki Green is the new secretary and has been doing a great job organizing and planning our budget. Michael Potts, the secretary, is the only returning exec board member and has been hard at work dealing with lockers. The exec board this year seems to be doing a great job bringing together the Electrical Engineer's as shown by attendance at the welcome back Sub Party we had earlier this year. We would like to thank everyone that came, the faculty for bringing appetizers and deserts, and HKN for helping with the finances.

Eta Kappa Nu News (HKN)

John Henkel – President

Tom Nipple – Vice President

Ryan Laspa – Treasurer

Bart Grinwald – Secretary

Dan Olson – Corresponding Secretary

As a new semester starts, HKN's been busy from the start. The faces around HKN have changed quite a bit due to graduations and several members taking co-ops this semester, but things are still clicking along with several new initiates this semester. Aside from providing the usual essentials of life to the electrical engineers (i.e. Little Debbie snacks), HKN has also been selling kits and parts for classes. In addition, HKN will be partnering with the IEEE Student Chapter to provide a grill for the Electrical Engineering Department to support fundraising opportunities. This year marks the Centennial Anniversary of the founding of HKN and we have the exciting opportunity to complete a project to commemorate this occasion and raise recognition of our chapter. Next week we'll be holding our bi-annual highway cleanup and we hope to see you all at the upcoming EE soccer game.

Faculty News

David Drury

This semester I have the pleasure of teaching EE 3020 (Analog Electronics), EE 3140 (Electric and Magnetic Fields — my all-time favorite course), and EE 4020 (UHF Oscillators). Four students have already dropped Fields — all of them are also in Analog Electronics, and they said that two Drury courses in one semester amounted to more fun than they could stand. We're experimenting with the Fields content — reducing the coverage of static fields so we can spend some time on propagating fields. I'm changing the way I teach oscillator design in EE 4020 to try to simplify the procedure.

In August the annual inspection on my airplane revealed that some of its aging parts had gone to that big aircraft in the sky. The worst was the exhaust system — holes in the

manifold, holes in the heat exchanger, and most of what was supposed to be inside the muffler had disappeared. There was also a crack in the spinner plate, a sick magneto, and an alternator with less than a year to live. I'd be \$4k poorer if my brother hadn't paid for half of the repairs.

A publisher (a small one, but a real publisher — someone who pays money to authors to publish their books) of science fiction liked my query letter and asked to see the manuscript of one of my sci-fi novels. He promises a decision on whether or not to publish it within two months (at which point I will probably receive standard rejection letter number two). I'm not quitting my day job.

The EE Department Search and Screen Committee succeeded in finding me a new cat, a gray and white tomcat named TC (short for TCWNN — The Cat With No Name). Unfortunately, TC tested positive for FIV, so I don't know how long I'll have the pleasure of his company, but he caught his first mouse within a month of moving into my house.

Gang Feng

Hello, everyone! I hope everyone had a wonderful summer! The most interesting experience I had in the past summer was fishing. Before the summer, I only fished twice in around 20 years. So it really took me some time to get used to the way of fishing in US. The first time I went fishing in Mississippi river, I caught several big carps, and that was also the first time I caught any fish using plastic baits. Encouraged by that exciting "first-time" experience, I fished there again a few days later, but I got nothing in five hours. Then, I tried live baits. I caught a full bucket of bluegills using worms. However, I really do not like the smell of worms and the taste of bluegills. So, finally I started to use minnows, after watching so many fishermen doing that. I did catch a lot of tasty fishes, but every time I had to struggle for one hour to catch minnows!

In early summer, my wife and I visited the Door County, and I very much like the scenic view. In July, we went to Lake Superior and took a Grand Cruise. I did not feel quite exciting about the cruise, but we were so lucky to see several black bears in the backyard of the hotel we stayed. Let me know if want to see them, too.

Our robot is still under construction. Hopefully we can have it move around with a few weeks. This semester I am teaching "Microprocessor System: Interface Design" (EE3760), and "Advanced Digital Circuit Design" (EE4750). You are welcome to let me know any ideas or problems that may need the knowledge from these areas.

John Goomey

Another school year begins. This semester I am teaching Circuits I and

Solid State for electrical engineering classes and Introduction to Engineering for general engineering classes. A credit has been added to circuits, and topics of op-amps and phasors have been moved into the class. It will be interesting to see how the changes affect to outcome of the course. I am hoping to see a lot of increased effort on the part of the students, and therefore higher grades. We will see.

Our fourth child, Abigail Dorothea, was born just after finals last spring on May 14th. She's a picture of her older sister Talitha who has just turned three. Talitha is continuing to push the boundaries of her age and is beginning to learn to read. The oldest, Andrew (10), is in fourth grade and is starting orchestra. I am hopeful that he will pick up on how to bow his violin quickly so that it will be easier to encourage him to practice. He is very enthusiastic about learning how to play, so I have little doubt that he will. He is already making plans for he on violin and I on guitar to be a musical duet for family and friends. John (1) is keeping my hopes of an early retirement up by continuing his linebacker behavior.

I am looking forward to what will be my fifth year at Platteville. This university really grows on a person. My enthusiasm for helping to keep this a great school to go to continues to increase, as does my fondness for the school and the people here.

Xiaomin Kou

As an EE professor, I watched the movie "Hero" recently for a break. Wow, what an interesting movie. I noticed a lot of people can't fully understand the movie due to the culture barrier and the lack of Asian history background. Therefore, I decide to write something about it so that you will not be misled by the trailer for an action or martial arts movie. This is a story about scarification. This is a story about unfortunate love. This is a story about the understanding of peace and "Our land". A good piece of work!

This movie is based on a true story happened two thousand years ago. China was divided into 7 major countries at that time. The King from Zhao sent a warrior to assassinate the King from Qin, who was a rising power and planed to unify the whole country. The warrior whose name is Jin Ke, pretended to show the map of Zhao to the King of Qin. He hid a knife inside of the map roll. He failed the mission and was killed of course. There are two great Chinese sayings come out based on the true story, 1). Da Yi Ling Ran, this is used to praise a person who wishes to scarify his life for what he believed in; 2) Tu Qiong Bi

Xian, the direct meaning of this one is that the knife will appear after you fully spread out the map roll. People uses this saying to describe the potential danger you might face with when somebody is showing you great stuff.

This movie borrowed the historical story but completely changed the philosophy and contents inside outside. I should say this is not an easy movie to understand. I can speak Chinese and I got pretty good education, however, I watched the movie twice before I can fully understand it. I think this is one of the good movies I've seen in recent years. Compared to the Oscar Winner Crouching Tiger, Hidden Dragon, this one is a lot deeper but the shortcoming is also obvious. The director didn't give individual actors enough space to express.

The logic and philosophy of this movie can be classified as follows,

- 1). There were fights between the 7 nations every year and people could hardly find peace because of that.
- 2). The king of Qin kills because he wants to unify the country.
- 3). Majorities from other countries wanted to kill the King of Qin because they don't want their nations destroyed. This included two other assassins, Sky and Snow, who wishes to give up their lives to help Nameless (Jet Li) to get closer to the King.
- 4). Broken Sword, the boy friend of Snow, gave up the plan of killing the King even when he got the chance. He tried to stop Nameless for his mission by writing two words "Our Land" to him. He believes that the king of Qin is the only hope to bring a final peace to the people lived on "Our Land", after enough killing of course.
- 5). Nameless (Jet Li) finally understood the meaning of "Our Land" at the last minute and gave up his mission. He reminded the King to remember the importance of "Our Land" to common people and truly bring peace to them. He sacrifices his life for "Our Land".

All and all, the lower level, to kill and be killed for the sake of survive and revenge (common people); the middle level, to kill for the sake of final peace and unification (the King); the high level, to be killed so that somebody else can kill easily. (Snow and Sky); the higher level, to be killed for the sake of not killing (Nameless); the beyond boundary level, to be killed for the prove of love (Broken Sword); the heart broken level, to kill the loved one by a so called mistake and then to kill herself (Snow),

Two more suggestions for people who want to watch the movie:

- 1) The story was told three times. Pay attention to the color changes. The director used very thick color the first time. The second time, it was grey. The last time, when the truth was told, blue kind of sad color was used. Really spectacular!
- 2). Pay attention to the actor who played the King of Qin. He is very good at expressing emotion details. I also like

the actress who played Snow. Maggie Cheung is one of my favorite Hong Kong movie stars, though the director didn't give her enough space, she was just good. How about the "Zhang Zi Yi" that Americans are familiar with from the Crouching Tiger, Hidden Dragon? I hated to say this but sorry, I am not a big fan.

Now it's time for me to grade the movie as a professor. How about a "B"? I gave The Brave Heart and Gladiator "A-", which are stronger in terms of acting and direction. But still a pretty high score. I gave "B+" to Star War and Cast Away. Matrix can receive a "B" from me, I like music movies, Sister's Act, Blues Brother and The Rock Star all can receive "B-"s from me. Now you must be wondering what can possibly be the kind of movie students to earn Dr. Kou's "A"? We do have a winner, that is Mr. Forest Gump, the only "A" student I've ever had in my Hollywood movie class!!

Yong Li

During the spring break, I went back to Shanghai where I had not visited for ten years. The change is bigger than I thought. I have difficulty to recognize the places, which I supposed to be familiar with. I also found not every person takes the advantage of the economic development.

As usual, this summer I was busy working for local industry and home improvement excepting one surprise for me. In June I received few bills and other letters from HMO. According to the letter that I have lost personal and family health insurance. I was so surprised. After contacting to several offices. I found it was a payroll office mistake and I was failed to check it out earlier. Now this is over. It is some kinds of summer lessons for me.

Dr. Yong Y. Li
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Mesut Muslu

Hello again. I hope you and your families are all doing well. After a long break, I am teaching EE121 again this semester. The course has been modified last semester and is now a 3-credit course. I must say that it is exciting and also challenging to deal with second semester freshmen students. They are learning a lot of topics (voltage, current, energy, power, node voltage analysis, superposition etc... DOES IT RING A BELL?) in such a short time. But it is very satisfying to see the excitement level go up tremendously since the beginning of the semester. In addition to what we used to cover, we also include AC analysis and OP-Amps in EE121.

I believe I have mentioned to you last time that two of my papers were accepted for publication. Both papers are now published. I have presented one of the papers at the American Society of Engineering Education Conference in Salt Lake City in June. At the end of June, my niece and nephew came to visit us for two months. We have done a "nature trip" to Yellowstone, Great Teton, and Glacier National parks in July for about three weeks. What a trip it was! How wonderful Yellowstone was with its geysers, wild animals, and natural landscape. How spectacular Great Teton Mountains were, and how majestic "going to the sun road" in Glacier park was.

Going back to work after we returned from the trip was, I must admit, a bit difficult.

Again, wishing you the best in the months and years ahead. Hope to see some of you at the Homecoming.

Nader Safari-Shad

Hello everybody,

I hope you are well and that you all had a good summer. Most of my summer was spent working for Alliant Energy office in Dubuque where I participated in several exciting projects. I did however managed to get away from work and take my family to the Dells and Door County. Overall, I had a good summer and now I am looking forward to a productive academic year of teaching and research.

My teaching assignments are as last fall, but I still feel that I need to optimize my lecture notes and some of the lab projects. I am continuing the advising of the IEEE student branch. I hope that I can be as effective as Dr. Phil Sealy when he had this role. My contact information is listed on our web site, so please feel free to contact me. I will always enjoy hearing from you.

Phil Sealy

Last summer I went to South Dakota with my dad and my son and my godfather and his son and grandson and some other old guys that my dad knows. We fished on a flowage of the Missouri River. It was great. The limits were six walleye per day per person and you could keep 3 days of limits. You could keep 5 fish of less than 22" and one over 22" each day. Most of the fish were between 15 and 20 inches. We limited every day and brought home a cooler full of fillets. The sunsets were awesome.

My family went to the UP for a wedding and we spent a few days up in the Keweenaw Peninsula north of Houghton. It's beautiful up there.

My wife and I had our twentieth anniversary last summer. People came from as far away as San Diego for an all day party at our place. I got all of my family together in one place (but not quite all at the same time). It was a blast.

I also went to my 25th High School reunion last summer. It was really fun to see some of those people who I haven't seen in 15 or 20 years. We had two high schools together and I linked up with my best friend from Junior High School. We went to a concert together in Madison last week. The "after reunion" party was quite eventful. If you want to know more you'll have to email me about it.

The week before school started in Minnesota my daughter came down with mono. She had such a bad case she spent three days in the hospital. Two days later we were in Minneapolis dropping off her stuff. We brought her home and went back up again in the middle of the first week of classes. She only missed two days. She's doing much better and she's all caught up already.

My son is finally taller than I am. I knew it had to happen. I stunted my growth when I was young and all the guys in Karen's family are giants. I still have the mass advantage. My father-in-law sold his house in Chicago last summer and he didn't need his Ford Explorer to commute anymore so he gave it to us (yeeehaaaw). Guess who's driving it all the time.

My youngest daughter is in a school play. She has a whole bunch of lines to memorize. She has to do them in a high-brow British accent. I've been helping her. You should see us arguing about whose accent is more high-brow and whose accent is more cockney.

I'm the chair of the College Expo committee again this year. EXPO is Thursday, March 31st. We are always looking for people to come back and visit for a day and act as judges for the projects. It usually only takes an hour or so to do the judging. If you're still in the area and are interested drop me an email at sealy@uwplatt.edu. It'd be nice to see some alumni here to represent the industries that hire Platteville EEs. Here's the deal: If you were in one of my classes and you come back to judge, I'll buy you a beer at The Perfect Pint (Steve's Pizza's Bar) on my way home from EXPO (like around 5:00 or 6:00).

Piyare Sharma

I am teaching EE 3310/ME4330 and EE 2210. I am pleased to receive some useful suggestions and help from some of you regarding the PLC lab using Contrologix software. Please keep on sending your suggestions regarding the PLC lab. Thanks.

