



"Developing Outstanding Ideas and Individuals... One at a time."

ARG Alumni Newsletter Winter '09

1. Greetings

Hello all across the world. Happy belated New Year to all members of the ARG family. Here's hoping this newsletter finds you well. I must admit that I'm much later than usual in getting this out. Turns out my new position takes a lot more time than I'd anticipated and so many many things have been pushed back a bit. As always, you can check the individual student web pages on the ARG website and/or check out the "What's New" section leading off the ARG website at <http://mr-roboto.me.uiuc.edu>. Stay tuned too because this website may change over the course of the semester. Mr-roboto has served us well but we may need to move to a MechSE departmental webserver and that will involve some changes to our website, even the domain name.

2. Who's New?

After the last ARG newsletter, we did have a few more people join us. I'm still aiming for that magic number of <10 but one of these days we may just have to resign ourselves to the fact that it's just wishful thinking.

Ms. Nanjun Liu joined ARG coming to us from China via the UK. She did her undergraduate work at the University of Birmingham in the UK and then came to Illinois for her graduate work. She's currently working on her M.S. degree in the

general are of steering control systems for off highway vehicles.



In addition to Nanjun, we had another graduate student that joined up with the ARG.

Rich Otten is one of those CU Boulder student (remember Kira's one) that



came east for grad school. Rich is working on a project for the ACRC that is trying to identify best practices for electronic system control; in particular EEV control of superheat.

Unfortunately, we don't have quite as many hills here at he's used to in Colorado. So far he's adjusting okay; he's actually from

Illinois before going to CU.

Finally, we had a postdoctoral scholar join us from UC Berkeley. Dr. Sandipan Mishra is working on NanoCEMMS related projects



including high performance motion control as well as some machine design and construction work in coordination with Kira. He did his PhD on Iterative Learning Control with Prof. Tomizuka so he was a natural fit for a lot of the activities we've already got going. He was also accommodating enough to take Doug's place in giving Neera a lot of grief for no apparent reason 😊

We also have a couple of undergrads working with us. Gina Zak and Amy Berg so things are as crowded as usual in 1409 MEL.

3. Accomplishments

As always, we like to keep you all updated about what we're doing here so that you can still speak with pride about being a part of the ARG. Here we just give a brief update on some of the more notable things that have occurred to ARG members since the last time we wrote.

- Tom McKinley passed his Prelim Exam
- Neera Jain turned in her M.S. Thesis
- Kira Barton and Neera Jain both received outstanding presentation awards at the ASME DSCC in Ann Arbor, MI
- Andrew Alleyne became the Associate Dean for Engineering

I must say that the last bullet there has been interesting. I'm learning a lot about my College of Engineering. AT this point, I'm taking a very guarded evaluation of the

position. I'm basically going to wait until the summer to decide whether or not this administration activity suits me. Stay tuned for the Summer newsletter for more. Also, if you know any of the people mentioned above, feel free to drop them an e-mail in the lab and say congrats. Also, you can check our ARG homepage regularly to find out whether any new news has come through.

4. Catching up with ARG Alumni.

We do have some news from the Alumni front. Some of you have sent me some wonderful update stories about you and your lives. It makes me very proud to know that the people who came through my lab are out in the world being productive members of society!

Don Carter (MS 2003) was working for Raytheon but, as he writes *"After 5 years of black projects, working on the Trident nuclear missile program, and doing some...well, cool stuff at times, I was ready for something different. I really haven't done any controls work other than some simple lead/lag filters, but I was told this during my interview so I really can't complain about that. I was and still am the dSPACE and real-time HIL guy in our department but I am a little burnt out on this. I made a name for myself early on with some HW simulators I helped design and build. There is a big push at Raytheon SAS right now by a senior fellow in my department who I work for to bring real-time simulation and modeling to all aspects of our business. But, as you can imagine, most people are resistant to change and prefer to do it the old way which is ridiculously expensive and time consuming in comparison. The work I did with you at Illinois proved to be invaluable. I really have to say that I couldn't have been more prepared for the job that I was given. I owe a lot of that to you and the environment of*

learning that you created down in the lab for all of us.

So, now I'm going to go do something completely different. I have a friend who is the CEO of a visual effects company in Culver City www.beaustudio.com. He has asked me to be the technical director of a visual effects R&D start-up for him. We've been talking for the past couple years about collaborating and he was able to finally get some funding this summer for the project. The work is interesting and I will be researching and developing algorithms to support his current business and eventually managing a group of 3-5 SW and HW engineers. I definitely had this type of managerial opportunity available if I wanted it at Raytheon, but I was ready for a change and the potential increase in quality of life was hard to turn down. However, with all that said, the nice thing about aerospace is that once you're in, you're in. It's a nice security net to have if I need it in the future.

I keep myself busy with a 1986 Porsche 944 Turbo that I have rebuilt from the ground up and all the outdoor activities you can find in SoCal."

Serena Tyson (MS 2008) has finished her basic Marine Corp training and is now waiting to head to flight school in Florida. Here you can see that there are very different skills needed in the USMC than are needed in



ARG. No Lyapunov equations here! We're

all rooting for Serena as she goes on to serve her country.

Mark Depoorter (MS 1997) was the first ARG graduate. He's still working with Deere and living in the Quad Cities area. With Deere setting up their Technology Innovation Center here in the Illinois Research Park, Mark had the opportunity to come visit last fall. Here's a couple of guys who are a lot older than when they first met more than 10 years ago. Yikes!

We'll continue going old school with an



update from Heather Lai (Havlisek) who was an ARG student (MS 1998) a little after Mark. Heather wrote and gave an update of what she's been up to the past decade.

Heather Lai; Graduate student 1996-1998

It has been 10 years since I graduated, I am living in Detroit, with my husband, Wilkin and three kids (Matthias, Caleb and Andrew). I am just beginning work on a Ph.D. at Wayne State University. Here is the short version of how I ended up here:

After I finished my MS with Andrew Alleyne at U of I in 1998, I began working for Motorola's automotive division in Chicago, Illinois, and after two years as a design engineer, I became a vibration engineer with a focus on vibration testing and validation.

This was one of the most fun jobs I have ever had I got to work with engineers, explaining the vibration theory needed for their designs, and for creating test specifications. During this time, I realized how much I enjoyed teaching, and for a year, while I was still working at Motorola, I took on a position as a houseparent for New Mom's Inc., a housing program for young women and their children in Chicago. That was a challenge, but while there I learned to love living in the city, and I also met my husband, Wilkin.

A few years later, when I my husband and I began our family, I decided, with fear and trepidation, that this was the time to leave my 'safe' engineering job and develop my teaching skills as an adjunct instructor at Wilbur Wright Community College in Chicago.

In 2004, after two years of part time teaching, my husband and I relocated to Detroit, Michigan (where we still live) to work with an inner city church involved in outreach and community development. We live near Wayne State University, and in the summer of 2007 I was given the opportunity to teach a class (Dynamics!) through the Mechanical Engineering Department there. It was so much fun that when the associate dean suggested that I go back to school so that I could teach full time, I decided to begin working on my PhD, focusing on vibration energy harvesting for self-powered sensors. So here I am, back in school, ten years after left U of I!



Wilkin and Matthias



Matthias (5), Caleb (3), Andrew (9 mo.)



Me with Andrew

In other news, a couple of globetrotters caught up in Beijing for a mini-ARG reunion. Here's Alex Montgomery (MS 2006) and Rong Zhang (PhD 2002) in Beijing. You may recognize the classy young lady in the picture from previous ARG Alumni newsletters. That's Alex's girlfriend Olivia. He went ***all*** the way to China to meet her extended family. That's very sweet.

I don't know about you all but I'm amazed that a member of our ARG family can travel halfway around the world and get together

with other members of our family. That's pretty cool you know!



Finally, I do have some news from a recent ARG alumnus. Brian Helfrich (MS 2008) left ARG and took a position at Sandia. However, before he started there, he took a tour of Europe with his girlfriend Liz. Here's Brian and Liz in front of Buckingham Palace in the UK. I guess they could have looked in on Ed and Evrin but perhaps there's a bit too much time between graduation dates for them to really know each other. Maybe next time!



That's all the news I have right now. Please, please, please send back information about yourselves and what you're doing. It's great for other ARG alumni to just know what each other is up to. It's also great for current ARG members to know that their time spent here in Illinois will prepare them for whatever path life leads them on. I'll look forward to hearing from all of you. Take care and have a great 2009! Sorry again for the delay.