MSE Alumni Chapter FALL 2019

Latest News



Dr. Lev Gelb received an Outstanding Faculty Teaching Award and **Tonya Griffin** received an Outstanding Staff Award from the Jonsson School.

Congratulations! We greatly appreciate all the work you do.

Brand new slogan, created by Roberta Hawkins, signifies our department's character created by its composition of highly achieving individuals working to further the field of materials science.



If you have news to share or would like to stay in touch with the MSE community you can join our monthly newsletter <u>here</u>.

Five answers

Dr. Lindsey Smith

Process Engineer at Intel

Here are five answers from Lindsey with great advice for current students.



1. Recall your last year in gradschool, what were the options you were considering as a career?

I was focused on industry and national labs. I had an internship in industry so that helped a bit and John (John Murphy, who also graduated from UTD-MSE and is now at Lawrence Livermore National Lab in California) had gotten a job at Livermore so I figured I had a shot. I also didn't have a high impact publication record so I figured getting tenure wasn't in my future.

2. How did you land your first job?

I essentially applied for anything I was remotely qualified for. I think a trap graduate students fall into is only focusing on the research they did - my first job was a dry etch engineer and I really didn't do dry etch in graduate school. Having the internship probably helped, but I didn't even get into the same organization within Intel.

3. Describe your transition from graduate school into the workforce.

I think the biggest transition is becoming more "business" minded. Getting quality product out the door is top priority as opposed to writing papers. It's still stressful, but my worries are different now.

4. What is your plan for the future? Are you staying at Intel or would you like to move on to something/somewhere else?

I think I will probably spend some more time at Intel building experience in different roles. It's kind of up in the air, but I toy with the idea of coming back to teaching.

5. Was there anything special about UTD and the department that

has helped in your professional career?

Most MSE professors have worked outside of academia and have diverse backgrounds and I think that broadens the opportunities for students. The department itself was so young that someone trying something outside the norm wasn't unusual.



Ron (MS CE 2016) and Lindsey met at UTD in 2014 and were married in 2018 after moving to Oregon to work at Intel. Ron and Lindsey like traveling with their friends and enjoying the nature around Oregon.

A big leap from Dallas to Boise

Dr. Liang Xu

Yield Enhancement Data Analysis Engineer at Micron Technology

Moving from a southern metropolitan city to a northern scenic town, and jumping from

academia to industry; Dr. Xu experienced major life transitions after leaving UTD.



Being the new face at Micron, I was always asked by my different colleagues: where are you from? Dallas, I would proudly tell them that I come from Dallas, although I don't have a cowboy hat in my closet, and can't speak with any Texan accent. But, yes, I am from Dallas in Texas, where my journey began.

Comparing with Dallas, in which I lived for more than five years, things are quite different here in Boise. The winter is so real with ten inches of ice and snow staying for three months, so you really need to learn how to drive in ice and snow (otherwise you will be like me, getting my car stuck in the snow). While in Dallas, we might enjoy the occasional snow and have a nice snow fight before it slips away in hours. There is no traffic at any time in Boise, however, you have to bear the cars running 30 MPH with a speed limit of 45 MPH on a one-lane road. Outdoors activities like hiking, skiing, biking, and fishing are extremely popular, but probably these are the only options during weekends. In Dallas, you might want to spend some daytime shopping in the malls, and then have a good drink with your friends at night in the downtown area. Last but not least, I miss all the Asian food in Dallas so much! Here in Boise, my wife probably cooks the best Asian food.

Working in industry after getting a Ph.D. in academia is another transition, and I think I have adapted to this one better. **My job in Micron is to analyze the electrical testing results of the dynamic random access memory (DRAM) devices under technology development stage.** Based on the data obtained from a series of complex tests, I need to perform detailed analysis of process experiments, assist with the identification of yield excursions, and identify correlations to root-cause issues during processing. Basically, every project is like writing a small paper about yield enhancement, except I don't have to do the experiments myself.

Learning was definitely overwhelming in the beginning. My Ph.D. research was focused on organic semiconductors in solar cell applications, which are significantly different from the silicon based memory devices made in Micron. Moreover, the way industry does research and development is by no means close to the lab experiments in school. However, I believe all my Ph.D. training and experience has equipped me with the proper confidence, as well as methodology to face the challenges. I was never too worried about not picking things up well enough (although I still made stupid mistakes initially), and I was never afraid of giving presentations to a broad audience within the company (although I did quite terribly in the first couple times). I just knew that by putting persistent efforts in reading, thinking, summarizing, and asking questions, as what I went through for my Ph.D. research, I should do well. I believe I did, of course with all the kind help from my supervisor and colleagues.

At this moment, I have been living in Boise for almost a year and a half. I am starting to enjoy the slow pace, scenic mountains, hiking and biking weekends, and limited Asian food. I like more and more of what I am working on at Micron. But still, I miss Dallas. I miss all my friends there, NSERL and the UTD campus, access to more authentic Asian foods, and the warm winter. Most importantly, I miss all the tough days and nights in Dallas that have trained me into a much stronger and wiser man.



Thank you Liang for sharing the challenges you have faced, both at work and in everyday life. We are sure Dallas also misses you. MSE Alumni living up north will relate to your experience during the much much colder winters.

Career story seminar

Dr. Audrey Hammack

Process Engineer at UTDallas

Audrey will be sharing her career story with current students, look out for the MRS UT Dallas Chapter announcement.



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Invite the community to join this MSE Chapter. Everyone is welcome.

Don't be shy, be featured. Interested?

Have some feedback? Send me an e-mail at mirelesmarce@gmail.com