## **UTD** MSE Alumni Chapter JUNE 2019

#### **Latest News**



UTD News Center has published a story featuring **Dr. Kyeongjae Cho**, Professor of Materials Science and Engineering.To know how his lab achieved a multi-value logic transistor read the full article <u>here</u>.

Congratulations to **Dr. Stephanie G. Adams** who has been appointed as the next Dean of the Jonsson School of Engineering and Computer Science - ECS. The MSE community gladly welcomes Dr. Adams to UT Dallas.



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>.

## **Career Story**

#### **Dr. Brian Coss**



Brian joined the MSE department in 2006 to work with Dr. Robert Wallace. Brian was a student intern at SEMATECH in 2008 and 2009 and he knew he wanted to join a semiconductor manufacturer and work in research.

#### Brian walked out of one interview and withdrew his application after another one. He then received offers from two places that were a good fit for him.

Here is the story in his words.

## Landing my first job

Back in graduate school I was an AMD fanboy, major AMD fanboy, I had always seen myself working for AMD. Fighting for the underdog, winning on the strength of the engineering solution. Unfortunately, their GlobalFoundaries spinoff did not do well initially and so I did not even try to contact them about employment.

I interviewed at DRS Technologies, a TI and Raytheon spinoff in Dallas, the interview was going very well until they showed me a video of their technology for combat operations. I decided right then that I would never help build weapons for killing. I walked out of the interview and got quite a bit of heat for doing so. Gordon Pollack had recommended me to DRS but he understood and then referred me to folks he knew at TI. The interview at TI went well, but I knew the hiring manager and I were not a good fit. I asked them not to make an offer.

Later that summer I traveled to Hillsboro, Oregon to interview with Dan Bergstrom for Intel. Adam Pirkle (a UTD grad who worked for Bob) referred me

to Dan and I nailed it. The interview went well, the 1:1's went well, and they made me an offer before I left.

I ended up interviewing at Applied Materials in San Jose and also getting an offer! Now I had a real dilemma, AMAT or Intel?

In the end I rationalized joining Intel over AMAT by thinking about this first job as more education. Which company would I learn more at? Which company could I leverage more for future opportunities? Which company would force me to grow as an engineer? The answer was for sure Intel, and in January 2012 I joined as a thin films metals process engineer in the Portland Technology Division.

#### From student to professional

When I joined Intel, everyone there seemed to be an accomplished seasoned professional, and I was this green immature student still. It's hard to describe the transition but it happened very slowly.

I eventually realized I wasn't poor anymore and I updated my wardrobe to business casual. I started getting regular haircuts. I got a new car. With the changes to my appearance people took me more seriously, I matured, learned from my experiences at Intel, and before I knew it, working felt as normal to me as being in the lab on a double over night experiment. I was appointed to roles of leadership and relished the feeling of accomplishment and authority. Somedays I miss the grad student lifestyle but being a full time engineer definitely has been a good experience.

The average for new college graduates at Intel is 2 years and I left Intel at 24 months on the dot. I went to an RF chip manufacturer in Colorado, then known as Avago, joined as a process engineer doing largely the same stuff I did at Intel, but then something wonderful happened. The bet I placed on Intel as an opportunity to further my education paid off. My experience with automation at Intel led to my current role as project manager on a massive automation project for the entire fab. It's been a great role and I have thoroughly enjoyed the challenge of bringing modern manufacturing best practices to Avago.

I'm debating what the next move is from here... I'm feeling like a change of pace is needed but am not sure where I'm headed yet. I've always wanted

to try my hand at integration, and I am strongly interested in returning to school for a masters in machine learning and automation.

# What makes MSE - UT Dallas so special?

Back in 2006, UTD was just becoming the power house it is today. The MSE program hadn't even been accredited when I joined and was still back in the ECSN building as NSERL hadn't even broken ground yet. I helped us move the lab into the NSERL building and helped install the UHV system in its new home on the fourth floor. These experiences I think were special. They showed me how to change, how to grow, and most importantly, gave me key insight into how our equipment was put together since I took it all apart and put it all back together.

Additionally, UTD has the best graduate student tuition and stipend support out of just about any other school. The department itself was full of former industry engineers, who were full of connections, experiences, and insights you wouldn't get from academics only. Many of them helped me launch my career either through friend recommendations or straight advocating for me: Wallace Martin, Gordon Pollack, John Maynard, Robert Wallace, Yves Chabal, Jiyoung Kim, KJ Cho and many others.

Thank you, Brian, for sharing your story.

As senior graduate students looking for our first job, we often place minimal priority in finding the best fit for ourselves. Brian's story highlights the importance of interviewing while staying true to our own standards which is the basis to the perfect work-life balance.



Brian is pictured here with his wife Rocio, also a UTD Alum, they got married in 2013. Rocio was a big part of Brian's time at UTD.

## **Interesting Read**

To fashion your unicorn career, speak up about your passions,

value, and objectives

By Alaina G. Levine. Click here

Did you know there is a UT Dallas coloring book?

Weird? yes. Want it? Click <u>here</u>. Why is it part of Alumni Benefits? beats me!

#### Share this newsletter around

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