

# Loving the Deep South



Chaoxuan Liu's first catfish!

By Chao-Xuan Liu, Ph.D. Student in Electrical Engineering, Louisiana State University - Baton Rouge

"Look! there are at least ten thousand cars parked out there in the grass field!" I shouted to my roommate in excitement and disbelief, on a Saturday morning in late August three years ago, "What's going on?" He answered with a smile: "It's football day. Welcome to the Deep South!"

As a new graduate student of electrical engineering in Louisiana State University, I soon learned that nothing was bigger than football here. On game day, over 90 thousand people gather on campus, tailgating and partying all day, before they enter the stadium to watch their

beloved LSU Tigers play. This is the best time to feel the southern hospitality, because almost anyone would offer you a beer to join their party. Indeed, nothing feels quite the same as cheering for your sport team with thousands of the world's loudest fans.

As exciting as sports are at LSU, my goal to come here was not just for fun. The heavy load of PhD course work quickly fell on me, and I needed to maintain a minimum GPA of 3.5 to keep my financial assistantship. Although the language and style of teaching presented me with quite a "cultural shock," I was glad to receive

straight A's in my classes after a period of adjustment. Since I carried a half teaching assistantship and half research assistantship, I also spent a considerable amount of time grading homework, exams and answering questions for undergraduate students.

Nevertheless, the bulk of my time was committed not to classes and TA duties, but more importantly to research in the area of micro/nano technology, which was what I had come here for. In this popular research area, peer pressure is immense, since very often different groups around the world work on



LSU EE building (in rain)

similar technologies, and whoever publishes their work first gets the majority of the credit. Therefore, to stay competitive, a 50-hour working week would be normal for me, not to mention the many over-nighters just before presenting my work in major conferences. I never feel tired of it because I love what I do. Plus, when my work is recognized by others in the community, it is a joyful moment.

Interested in my research? My thesis topic utilizes a "magic material"—carbon nanotubes, which is incorporated into a polymer matrix to form a piezoresistive (changing electrical conductivity)

nanocomposite material. Through a new printing technology we proposed, the composite can be made into patterns of micro-scale, allowing us to realize sensors (e.g. pressure, strain) that are much more sensitive than current technologies. Today's biomedical industry abounds with potential applications for these biocompatible sensors, yet, technical challenges are everywhere. So it is an ideal area for me, a person who loves problems and intriguing work, to dive into and build my career as an engineering researcher.

Outside of work, life here is anything but boring, because I always find

plenty to do. On a sunny and warm weekend in January (it's the south!), I love taking my little Toyota Corolla onto I-10 and driving it all the way down to the Big Easy—New Orleans. There I get to enjoy beautiful authentic Jazz and, of course, my beloved Hornets (basketball). Also I have spent many weekends in fellowship with my friends in BCM (Baptist Collegiate Ministry). They welcomed me warm-heartedly the first time I walked in their door, and through them I have learned so much about the cultures in this country.

Now already a fourth year student, I still vividly recall that, just two days after my arrival at LSU, I joined in a fishing trip to Mississippi with a group of local students. When I was celebrating the first catfish I had ever caught, the other guys asked me "how many years have you been here?" "Three days" I answered. And they went "Wow!"...

So if you are up for an adventure and want to enrich your experience here in the Deep South or anywhere in U.S, this is my tip: Don't be shy! Reach out! You'll love it!



Football game in LSU Tiger stadium