March 2014 / ISSUE No. 3

ShanghaiTech University SIST NEWSLETTER







School of Information Science and Technology

ShanghaiTech Undergraduate Admission Information Session ShanghaiTech Recruits Its First Undergraduate Students

February 19th 2014 – ShanghaiTech Undergraduate Admission Information Session open to high schools in Shanghai was held on the new campus in Pudong. The event attracted as many as 52 school principals.

In his opening speech, Dr. Mianheng Jiang, President of ShanghaiTech University and President of CAS Shanghai Branch, talked about vision and mission of the university, which is to serve the national development strategy by nurturing talents with innovative and entrepreneurial spirit. He also told the participants that ShanghaiTech emphasizes on the interaction among different fields-research, education, and industry. The university adopts the system of residential colleges for undergraduate students and provides mentorship for both undergraduate and graduate students.



Approved by Ministry of Education, ShanghaiTech will recruit its first cohort of 200 undergraduates in fall of 2014. The undergraduate programs will provide students with fundamental knowledge, expertise in their disciplines, and interdisciplinary experiences.

The new campus currently under construction covers an area of 900 acres with total usable space up to 700,000 square meters. It is designed

to best facilitate faculty and students, as well as to enable the integration of teaching and research. It is also environmental friendly and energy-saving. The construction is expected to be completed by the end of 2015.

After the information session, all participants paid a visit to the nearby National Protein Center and Shanghai Synchrotron Radiation Facility.

ShanghaiTech University



Hear the Wishes from ShanghaiTech Students...

ShanghaiTech is where our dream begins and where we are able to explore a new horizon.

Mingchao Jiang

I wish you all a happy New Year.

Zhuangfeng Weng

I wish you happy when I am with you.

Huihui Zhu

Wish all the teachers' and students' dreams come true.

Shuaixu Shi

I wish ShanghaiTech gets better and better.

Lu Cao

Wish all the teachers and students in ShanghaiTech a happy, healthy and wonderful 2014 together.

Huamin Liang

- 1、Seminar by Prof. Jingyi Yu from UD
- 2. Seminar by Prof. Juncheng Cao from SIMIT, CAS
- 3、Seminar by Prof. Yao Qian from Microsoft
- 4、 Mental Health Lecture by Prof. Yeping Liu
- 5. New Year's Eve Party of ShanghaiTech
- 6. New Year Dinner Party of SIST Students
- 7、Ping-Pong Time
- 8. The Night of Movie
- 9、Yoga Time

What the SIST Students Are Saying...

@everyone. After spending several months here in ShanghaiTech, I've built deep friendship with my new friends. The home ambiance you created around me makes me feel I'm not alone anymore. Thank you, guys!

--- by Tingting Zhang

@ShanghaiTech. ShanghaiTech and ShanghaiTechers, I love you. I know we'll spend our unforgettable future together and I hope we can be together forever. Wish you guys a fruitful future.

---by Open Sun

@Lin Tang. Though we haven't said a word to each other, I know you are a gentle girl.

---by someone

@Prof. Yang Yang. People say random process can only be passed randomly. Would you let me go?

- by Maths Dregs

@ShanghaiTech. Thanks a lot, every teacher and companion of mine. It's you that companied me during one of my most important new years. We should be working hard enough to deserve the love and care of ShanghaiTech. At last, happy new year, everybody!

- by Ge Su

@RF Project. It took me two-week hard work on the project before I finally got some results. Thanks to my friends, the literatures I've referred to and ADS 2009 crack.

- by pig me

@Ms Yao. Thank you for your enduring hard work and your help for our difficulties. Wish you a great new year.

- by little boy



ShanghaiTech University



VISITING PROFESSOR PROFILE: PROF. SHUGUANG CUI

(In September of 2013, SIST welcomed Dr. Shuguang Cui (Ph.D, Stanford'05; Associate Professor at Texas A&M University) as a Visiting Professor for a year. Let's listen to his sharing about himself and his joining ShanghaiTech.)



Shuguang Cui
Visiting Professor

Instead of just telling the story about myself, I want to focus on the interesting pieces between me and ShanghaiTech.

ShanghaiTech, a name that was known to almost nobody in the science and technology community a year ago, now becomes a hot subject under various discussions around the world. I feel proud and lucky that I have been part of and contributed a little bit to this transition process.

I started to hear about the ShanghaiTech project three years ago from Dr. Zhi Ding, one of the founding members for our SIST. Right after the introduction about the project from Zhi, I realized that this may lead to something big and started to get excited. The excitement comes as two-fold: This opens an outward door to pioneer the necessary basic research reform for Chinese university systems; and it opens an inward door to offer domestic students a shortcut to a world-class education platform.

To help you understand why I appreciate such two aspects that much, I want to tell you the brief growth path of myself behind these years. I was born and grew up in a poor country-side village in Hebei province. Before I went to the college, honestly I knew nothing about my career goals (yes, like many kids of my generation, I once wanted to become a PLA soldier). As I grew up, one thing that I realized quickly is that you have to study hard to earn a chance to change your life as a country boy. Luckily, after...(50000 words skipped here) I entered Beijing University of Posts and Telecommunications, in the radio engineering department, to start my college life, although the main reason to choose such a major at that time is simply because it is almost too cool to hold a cellular phone at your hand (I mainly get that impression from the early-90 Hong Kong mafia movies).

As I learned more at the college, quickly I found that it is science and technology (S&T) that is endorsing the rapid growth of our society, and I got really interested in doing research, especially basic research with long-term impacts, in the S&T areas. However, due to various historical reasons, our university education/research system did not provide a healthy environment for basic research at that

time. As a result, we were lack of world-class researchers, educators, and facilities to support a career goal like mine. Not surprisingly, as many other peer students did, I went abroad for higher education. I was lucky to have the chance to learn from and work with some of the best in S&T at Stanford when I pursued by Ph.D. Yes, I gained a lot in that period; but as I look back now, I also found that I lost so much as a price to seek my personal dream abroad. When I was studying in North America, I didn't see my parents for almost 4 years (simply no money to buy an airplane ticket) and the first time I came back to see them is one month before my mother passed away due to cancer. She didn't disclose her illness to me just for minimizing the interference to my school work; how sad! As what usually happened in a TV drama indeed happened to me, I started to ask myself: If I were given a second chance to choose, would I still go abroad for graduate school?

If this question was raised 15 years ago, the answer is 60% YES; if this question was raised 5 years ago, the answer is 60% NO; if this question is raised now, the answer is 90% NO. What happened in the past years over our education system? Things have been changing, slowly and luckily in a positive way, although there have been many bumps and noises on the path. Especially in the past two or three years, we all saw the determination from our higher ministration on trying various reforms in the goal to establish a healthy environment for basic research. There have been many trials for establishing new universities or for establishing new tracks inside existing schools. Yes, ShanghaiTech is one of the new trials; but I want to argue that it a unique one, in many aspects. Indeed, she gives me that 30% confidence boost in answering that question.

With my eight years as a faculty member at US, I could here try to explain why ShanghaiTech is unique. 1) She is being built according to the US university model, which is a proven success to motivate creative thinking and high-impact research. 2) She is being built from scratch, without worrying about the internal conflicts inevitable for reforms conducted inside an existing university. 3) She emphasizes the faculty and students instead of the administration body, when it comes to the question on who is shaping the school in the future. 4) She fully integrates the resources available from Shanghai, the most energetic city in the world, and from the Chinese Academy of Science, the most advanced research agency in China. 5) She has been under a great leadership with high-profile figures from government, industry, and private sectors, which is critical in the founding stage. 6) She appreciates the organic interaction between basic research and entrepreneurship, whose importance has been proven in the Silicon Valley.

With the above unique features at ShanghaiTech, we could have the first step established towards success: We could attract world-class talents to join the faculty team. We all know there are numerous development opportunities in China over this generation; but why have most, especially young, scholars been scared of coming back and joining Chinese universities in the past? It is mainly due to the current evaluation system being used by existing universities in China. In a typical school, how does a young scholar manage to be "successful"? Only one way: get specific title stamps along different stages in your career (if you miss one, you miss all). For example, you fight through the titles of good young talents, young 973 project leaders, excellent young talents, senior 973 project leaders, and ultimately CAE/CAS members. Such title evaluation many times is not based on peer grading on your research reputation within the international scholar community. To fight for them, you have to start as a worker ant in a large hierarchical group tree, with a high probability being flushed out internally before you pop out; you have to get highly involved in very hands-on engineering projects, with no time left to conduct basic research; you have to spend a tremendous amount of energy on sorting out inter-personal relationship with all kinds of entities. But now, in the model of

ShanghaiTech, we go through a western-style tenure track, with your promotion based on peer evaluation over your research reputation, and your (high) salary was set at the beginning independent of how many engineering projects that you could secure. Of course, you now have the luxury of doing basic research. More importantly, even if you want to see how your basic research impacts the society, ShanghaiTech keeps the entrepreneurship path open, just like what California schools have been doing.

Enough said to attract world-class faculties to join ShanghaiTech. With such a workforce, the second step towards success is naturally doable, i.e., good professors attract good students, and why not? Maybe in the first few years, the average quality of incoming students is not that high. But what defines good professors is not to generate good graduates from good students; instead, it is to generate great graduates from average students. With the world-class faculty that we hire, we could do it. With good faculties and great graduates, then the positive feedback kicks off: We will have even better faculties joining and even better students attending. By then, a lot more could be expected from ShanghaiTech: first-class students, first-class graduates, world-class research results, and possibly creative startups.

People may say you are too optimistic: In China, a new school may be easily unified and colored by the existing system. Indeed, but I personally think as long as our school executives hold our unique founding principle on faculty evaluation and faculty/student-centered administration, we could get there!

Time flies; I have been in ShanghaiTech for half a year since the Fall of 2013. The past year is my lucky one, where I received the IEEE Signal Processing Society best paper award and elevated to IEEE Fellow at a very young age. But all these are not comparable to my experience earned and friendship developed at ShanghaiTech. The excitement to see a star school rising and to get involved is imply overwhelming. Sadly my sabbatical leave at ShanghaiTech is already half-way through; but I believe my story with ShanghaiTech is just starting.

Stay tuned!

BIO:Shuguang Cui received his Ph.D in Electrical Engineering from Stanford University, California, USA, in 2005, M.Eng in Electrical Engineering from McMaster University, Hamilton, Canada, in 2000, and B.Eng, in Radio Engineering with the highest distinction (ranked No.1 in the department) from Beijing University of Posts and Telecommunications, Beijing, China, in 1997. He is now working as an associate professor in Electrical and Computer Engineering at the Texas A&M University, College Station, TX, and as a visiting professor at ShanghaiTech University, Shanghai, China. His current research interests focus on big data oriented information processing over networks, including large-scale distributed estimation and detection, information theoretical study of large distributed storage systems, and large-scale cognitive system design. His research papers have been highly cited; according to the data on 2/16/2014 from Web of Science, 8 of them had been ranked within the top 10 most highly cited papers among all published over the same periods in the corresponding journals. He was the recipient of the IEEE Signal Processing Society 2012 Best Paper Award. He has been serving as the TPC chairs for numerous conferences. He has also been serving as the associate editors for IEEE Transactions on Signal Processing, IEEE Transactions on Wireless Communications, IEEE Communication Letters, and IEEE Transactions on Vehicular Technology. He is the elected member for IEEE Signal Processing Society SPCOM Technical Committee (2009~2015) and the elected Secretary for IEEE ComSoc Wireless Technical Committee. He is an IEEE Fellow.



JOIN SIST!

OUR OPEN TENURE-TRACK AND TENURED POSITIONS

The newly launched ShanghaiTech University invites highly qualified candidates to fill multiple tenure-track/tenured faculty positions as its core team in the School of Information Science and Technology (SIST). Candidates should have exceptional academic records or demonstrate strong potential in cutting-edge research areas of information science and technology. They must be fluent in English. Overseas academic connection or background is highly desired.

ShanghaiTech's is built as a worldclass research university for training future generations of scientists, entrepreneurs, and technological leaders. Located in Zhangjiang High-Tech Park in the cosmopolitan Shanghai, ShanghaiTech is ready to trail-blaze a new education system in China. Besides establishing and maintaining a world-class research profile, faculty candidates are also expected to contribute substantially to graduate and undergraduate education within the school.

Academic Disciplines:

We seek candidates in all cutting edge areas of information science and technology. Our recruitment focus includes, but is not limited to: computer architecture and technologies, nano-scale electronics, high speed and RF circuits, intelligent and integrated signal processing systems, computational foundations, big data, data mining, visualization, computer vision, bio-computing, smart energy/power devices and systems, next-generation networking, as well as inter-disciplinary areas involving information science and technology.

Compensation and Benefits:

Salary and startup funds are highly competitive, commensurate with experience and academic accomplishment. We also offer a comprehensive benefit package to employees and eligible dependents,

including housing benefits. All regular ShanghaiTech faculty members will be within its new tenure-track system commensurate with international practice for performance evaluation and promotion.

Qualifications:

- A detailed research plan and demonstrated record/potentials; - Ph.D. (Electrical Engineering, Computer Engineering, Computer Science, or related field); - A minimum relevant research experience of 4 years.

Applications:

Submit (in English) a cover letter, a 2-page research plan, a CV plus copies of 3 most significant publications, and names of three referees to: sist@shanghaitech.edu.cn.(until positions are filled). For more information, visit http://www.shanghaitech.edu.cn.

FACULTY RECRUITMENT NEWS

Since mid-December, 2013, SIST has held the third and fourth rounds of faculty interviews in Shanghai. We have successfully recruited Dr. Kewei Tu from UCLA in the third round of interview, and he joined us in this February. In the fourth round of recruitment, we have invited 11 shortlisted candidates from all over the world to take part in the on-site interview, and have had a highly successful interview round on campus. We expect to have a few top-notch new faculty members to join us soon.

