ShanghaiTech University
SIST NEWSLETTER

School of Information Science and Technology

ShanghaiTech Inno–Forum Hosts Nobel Laureate Rothman and Tesla's Musk

On the evening of April 23, 2014, a large crowd of ShanghaiTech University students, faculties, and staff members was joined by two exciting guests: Nobel Laureate James E. Rothman and Tesla CEO Elon Musk at the Yueyang Road Campus. The guests were keynote speakers at ShanghaiTech's Inno-Forum to cultivate the innovative spirits of China's newest research university.

Dr. Rothman, Wallace professor of biomedical sciences at Yale, chair of the medical school's department of cell biology, and founding director of Yale's nanobiology institute—was awarded the 2013 Nobel Prize in Physiology or Medicine with Randy W. Schekman, and Thomas C. Südhof, of Stanford. Rothman joined ShanghaiTech University as a Distinguished Adjunct Professor.

Elon Musk co-founded PayPal and currently leads two other companies he created: Space Exploration Technologies (SpaceX) and Tesla Motors. He is also chairman of SolarCity. He led SpaceX's efforts to be the first private company to successfully launch and dock a spacecraft with the international space station.

Dr. Mianheng Jiang, president of ShanghaiTech, served as the host and the moderator of the special forum. He first introduced that the mission of ShanghaiTech University is to nurture future innovative talents and to seek innovative solutions to address the challenges that China faces in areas of energy, material, environment, and human health. He also highlighted how ShanghaiTech is developing its new education model to fulfill this mission. Dr. Jiang encouraged all students and faculties to learn from the two distinguished guests, and become future leaders in science, inventors of new technologies and entrepreneurs.

Dr. Rothman and Mr. Musk delivered separate speeches to the standing room only crowd. Rothman talked about his research experience, and emphasized the critical role played by universities as an environment for innovation and creativity. He encourages the students to be unafraid of mistakes and failures on their paths to innovation, find their own career goal, and learn from one another. Musk shared his first dream of wishing to become the person to make magic come true through hi-tech. He talked about how SpaceX learned from failed rocket launches and succeeded in winning the contract by NASA for 12 cargo flights to and from the International Space Station. He also emphasized the importance of trying all kinds of new ideas despite past failures in innovation.

The excited Inno-Forum audience was given a special opportunity to interact with the speakers by asking questions. Also present at the Inno-Forum are members of the Chinese Academy of Sciences and other universities. Nearly 100 candidates for ShanghaiTech undergraduate admission from local high schools also joined the Forum.

Prof. Yi Ma Joins SIST

On February 10, 2014, SIST welcomed Professor Yi Ma on board as a new member of its growing faculty. Dr. Yi Ma was research manager and principal researcher of the Visual Computing Group at Microsoft Research Asia, Beijing, China, before joining ShanghaiTech. He is a distinguished researcher and has many years of research experience in the cutting edge areas of information science and technology. Dr. Ma was also a faculty member at the University of Illinois, Urbana-Champaign.

ShanghaiTech and Broadcom Alliance

March 19, 2014, ShanghaiTech announced an alliance with Broadcom to bring enhanced Wi-Fi infrastructure to Shanghai. Based on common interests, ShanghaiTech University and Broadcom will collaborate on a joint "Wi-Fi City" program to deploy a carrier grade Wireless LAN network on the university's new campus in Pudong. Upon completing the pilot project, the two organizations intend to collaborate in rolling out the network coverage in increasingly larger geographic areas. Broadcom Corporation is a FORTUNE 500 company and is a global leader in semiconductor solutions for wired and wireless communications to seamlessly deliver voice, video, data and multimedia connectivity in the home, office and mobile environments.

Undergraduate Recruitment at ShanghaiTech: Talents Unlimited

More than 800 enthusiastic final year high school students, accompanied by their equally excited parents, swarmed the Yueyang Road Campus of ShanghaiTech from March 9 to April 13 on the first ShanghaiTech Open Day. This event is the first of its kind in China's higher education system that sends thrills and shockwaves to the public and educators alike. These students came from 9 provinces nationwide and attend this full-day event on 8 separate weekend day compete for a spot on the inaugural 2014 class at ShanghaiTech. Another Open Day Event was also launched in Chengdu to lessen the burden of traveling by students in the distant Sichuan Province on April 12 and 13.

ShanghaiTech specifically designed Campus Open Day as key step in its innovative undergraduate admissions process. This event aims to attract talented students to ShangahiTech by providing participants with multiple activities including team works, design, analysis, group presentation, as well as individual interviews with faculty panels.

ShanghaiTech Open Day attracted tremendous amount of media attention. Many students interviewed by journalists remarked that the processes are highly productive and the activities are fascinating. They enjoy the unorthodox Campus Open Day experience much more than the traditional onsite tests. At the same time, ShanghaiTech also arranged specific events for the accompanying parents on Open Day. They visited ShanghaiTech's Pudong Campus under construction and the nearby scientific research facilities. The parents were given full access to communicate with ShanghaiTech's leadership directly.

From this talent pool, ShanghaiTech plans to select 200 students for admission as its inaugural class of undergraduates to enroll in Fall 2014.

NEW FACULTY PROFILE:
PROF. ZIYU SHAO

(In January 2014, SIST welcomed Dr. Ziyu Shao (Ph.D. 2010, The Chinese University of Hong Kong) on its faculty. Let listen to his sharing about himself and joining ShanghaiTech.)

As a proverb goes, life is like a box of chocolates and you never know what you're gonna get. Rephrasing it with some jargons in engineering field, I would say, life is a complex decision-making process with uncertainties. Facing various unpredictable or even unobservable constraints, we optimize our life with a sequence of choices, hoping for the best. Then here is the question: what is the best life? There are no universally accepted answers. For me, the answer is simple: live with somebody you love and work with something you love. Next I will share my stories about three important choices made at the critical crossroads of my life.

Like most Chinese kids, my first important choice comes after the national college entrance examination: the choice of major and university usually has a deep impact on the trajectory of one kid's life. At that time, it was not hard for me to make a choice.

Since my childhood, my dream job is being a scientist. Heroes in my heart then were Carl Friedrich Gauss (a mathematician in 19th Century) and Albert Einstein (a physicist in 20th Century). Later I learned that 21st Century would be the era of information technology. Thus I chose electrical engineering as my major since it is the only major to satisfy my strong interests in mathematics, physics and information technology. On the other hand, I am not either nerd or geek. I love literature and photograph art. Thus I chose Peking University as my university since it is the best university to satisfy my balanced interests in both sciences and humanities.

As it turned out, my first choice was right! Four years' campus life at Peking University was a moveable feast, rich and vibrant. I still remember the highs and the lows, the triumphs, the challenges, and the celebrations, especially those caffeine-fueled all-nighters for course projects or meteor showers, and the unbridled joy for revealing the hidden intuitions of complex problems or making a friend indeed.

My second important choice comes in my seventh year at Peking University: the choice of research field and university for my Ph.D. study. I was admitted into the graduate school of Peking University without exams and I was recommended to pursuit a master degree in the national key lab of optical communication. After three years' research in optical communication, I realized that all-optical device is the key in this field. If I want to continue my research in this field and make some impressive work for the Ph.D. degree, I need to learn chemistry and material science, the subjects that I have no either interests or gift.

It was really hard to make up my mind to change the life track and choose other research fields. After many sleepless nights with serious considerations, I decided to choose network theory as my research field, an interdisciplinary field of communication, control and computing. Department of information engineering at the Chinese University of Hong Kong (CUHK) is very strong in this field. Thus I chose to pursue my Ph.D. degree there.

As it turned out, my second choice was perfect! At CUHK, I got systematic training not only in mathematics, but also in engineering disciplines including information theory, control theory, optimization theory, queueing theory, game theory and machine learning. I was fortunate to discuss and collaborate with my role models including my advisor Prof. Shuo-Yen Robert Li, Prof. Raymond Yeung and Prof. Tony Lee from CUHK, Prof. Kannan Ramchandran and Prof. Jean Walrand from UC Berkeley, and Prof.

Mung Chiang from Princeton University. Their broad knowledge and deep insights have a great impact on my research. I think, and I hope, what I have learned from them is not just the knowledge, but their insights, inspirations, and the ways of conducting research and living. What is more, at CUHK, I was fortunate enough to meet the girl I love and marry her!

My third important choice comes in my seventh year at Hong Kong: the choice of workplace. At that time I have got my PhD degree and stayed as a Postdoctoral Fellow. With the help from my advisor and other professors, I obtained several good job offers: associate professor positions from top universities in mainland China, and tenure-track assistant professor position from ShanghaiTech University. The former is a stable job and many people suggested me to choose it. The latter is a challenging job with both great potentials and uncertainties. It is a really hard choice! Finally Steve Jobs' words inspired me: "Don't let the noise of others' opinions drown out your own inner voice. Have the courage to follow your heart and intuition! " Thus I chose to join the ShanghaiTech University as an assistant professor.

As it turned out, my third choice was great! Five months' experiences here impressed me a lot and strengthened my confidence. What impressed me most was the idea of building a world-class university in China to offer a world-class education to talented Chinese students and encourage both innovation and entrepreneurship. Real tenure-track system, top-down design for teaching and research system, groups of idealists with solid work, positive working atmosphere with a family sense, … each day is a great day! I am so proud of creating a history, being part of a history, and witnessing a history, the history that how ShanghaiTech University becomes the world-class university!

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 is built as a world-class 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, PDF version) 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.

SIST'S ROUND 5 ON−SITE INTERVIEW

SIST hosted seven international candidates from Europe and US to take part in the fifth round of on-site interview during May 20-21. The on-site interview process consists of a technical seminar by each candidate followed by one-on-one interactions with the current faculty members, search committee members, and leadership of the university. The search committee expects to finalize its recommendation with respect to tenure-track offers in the coming days.