# NYU SHANGHAI

Winter 2020

Magazine

## Making Sense of Data

### How NYU Shanghai is staying on the cutting edge of the data revolution

For and about the
NYU Shanghai community

## ABOUT

Founded in 2012, NYU Shanghai is China's first Sino-US research university and the third degree-granting campus of New York University's Global Network. Our student body consists of 1,500 undergraduate and graduate students, half of whom are from China. Students from the United States and some 70 other countries represent the other half. NYU Shanghai seeks to cultivate globally-minded graduates through innovative teaching, world class research, and a commitment to public service.

## ON THE COVER

Our Internet-connected devices are constantly generating gigabytes of raw data about our daily lives. Data science is helping to make sense of the information deluge — and NYU Shanghai is working on the cutting edge of the field. Cover illustration by artist Yang Shuhui.

## IN THIS ISSUE

### NEWS

### SECTIONS

NYU Shanghai broke ground May 30 on a new campus in Pudong's Qiantan district. Designed by global architectural firm Kohn Pedersen Fox (KPF), the new campus is expected to open in 2023. Below is KPF's rendering of the new campus's west gate at night. Image courtesy of KPF.

### STORIES & INTERVIEWS

# NYU Shanghai Breaks Ground on New Campus

**The new campus will double the amount of available classroom space and serve as a cultural hub for Shanghai's Qiantan neighborhood.**

On May 30, NYU Shanghai broke ground on a new 114,000 square meter campus in Shanghai's newly established Qiantan International Business Zone, on the eastern banks of the Huangpu River. The new campus, incorporating features of both Chinese and Western academic design, is expected to open in 2023.

"This marks an important step forward not just for NYU Shanghai but also for Shanghai's ongoing efforts

> **"** The design for the campus brilliantly expresses our school's unique devotion to uniting China and the rest of the world in a shared commitment to transformative education and research. **"**
>
> — Vice Chancellor Jeffrey S. Lehman

A street view rendering of the new campus in Shanghai's Qiantan neighborhood. Image courtesy of KPF.



The new campus's central courtyard. Image courtesy of KPF.

to advance educational reform and its growth as an international metropolis," said Chancellor Yu Lizhong.

The new campus will double the amount of classroom space available at NYU Shanghai's current campus on Century Avenue. Plans include a 5,000-square-meter library, roughly 7,000 square meters of lab and research space, and new dedicated athletic space.

Located along Qiantan's southern edge, the new campus will also serve as an anchor for educational and cultural life in the area.

"NYU ... has a strong tradition of being a university without walls and also being very integrated with its host city," said NYU President Andrew Hamilton. "This new campus for NYU Shanghai will truly be in and of the city of Shanghai."

The University's new home was designed by Kohn Pedersen Fox (KPF), the creative force behind several already-iconic buildings in the Shanghai skyline, including the Shanghai World Financial Center and the Jing'an Kerry Center.

The architects stayed true to NYU Shanghai's dual identity as the first Sino-American joint university. Four entrances at the site's corners will evoke both the gates that traditionally marked the entries to Chinese cities and the iconic Washington Square archway at NYU's New York

campus. Inside, a nearly 9,000-square-meter courtyard will reference not only the central "quad" of many American universities, but also the Chinese scholar's garden.

"The design for the campus brilliantly expresses our school's unique devotion to uniting China and the rest of the world in a shared commitment to transformative education and research," said Vice Chancellor Jeffrey S. Lehman.

NYU Shanghai's dedication to fostering the easy movement of ideas across traditional boundaries inspired the new campus's many mixed-use spaces and layered design.

Although the ground floor of the new campus will be divided into four separate buildings, each building will merge with the others to form a single interlinked structure at the third above-ground level. The structure will also incorporate over 20 green terraces, which together with the central courtyard cover over 86% of the site's surface area.

KPF and Lujiazui Properties incorporated comprehensive feedback on campus needs and goals from NYU Shanghai faculty, staff, and students throughout the planning process. In recognition of this collaborative approach and its innovations in planning and design, the Society for College and University Planning (SCUP) awarded KPF "Honors for Excellence in Planning a New Campus." It is the first project in China to win such an honor.

# US and Chinese Economists Propose "A Way Forward" on Trade

On October 27, NYU Shanghai hosted the official release of a new proposal from 37 of the world's most prominent Chinese, American, and international economists and legal scholars, including five Nobel Laureates, for resolving the current trade conflict between the United States and China.

The group called upon the US and China to steer a middle course between presuming that China will adopt a Western-style market economy and forcing a potentially catastrophic "decoupling" of the two economies and advocated for a new negotiating approach enabling each country to simultaneously adopt its own economic model, protect itself from economic injury by the other, and allow its citizens to enjoy the maximum benefits of mutual trade.

The plan of action was developed by a joint working group of ten scholars convened by Dani Rodrik, Professor of International Political Economy at Harvard University's Kennedy School of Government, Yao Yang, Dean of the National School of Development at Peking University, and NYU Shanghai Vice Chancellor Jeffrey S. Lehman at the New York City campus of New York University, and was endorsed by other 27 scholars from the US, China, Canada, and Europe.

*Read a full copy of the plan at: joint-statement.shanghai.nyu.edu*

## University Launches Two New Graduate Programs

NYU Shanghai is currently accepting applications for a new PhD program in Data Science and for a new low-residency Master's degree in Interactive Media Arts (IMA). Coursework for the IMA program will begin in summer 2020, and for the Data Science program in fall 2020, and will take place in both New York and Shanghai, with graduates earning NYU degrees upon completion of their programs.

Partnering with the NYU Graduate School of Arts and Science and the NYU Center for Data Science, the new doctoral program will bring the total number of PhD degrees offered by the University to eight; while the IMA degree, offered jointly with NYU's Tisch School of the Arts, will become the University's fifth master's program.

*For more information about the master's and PhD degree programs at NYU Shanghai, please go to: shanghai.nyu.edu/academics/graduate*

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### In Memoriam: Professor of Mathematics Vladas Sidoravicius, 1963–2019

Professor of Mathematics Vladas Sidoravicius passed away unexpectedly in May at age 55. Sidoravicius, a native of Vilnius, Lithuania and graduate of Moscow University, arrived in Shanghai in 2015 from the Instituto Matemática Pura e Aplicada in Rio De Janeiro and became the University's first tenured faculty member in Mathematics. Colleagues remembered him as a brilliant mathematician who cultivated lifelong friendships, generously mentored students, and left a lasting impact on the study of probability theory in universities across three continents. "Vladas had made Shanghai his home, as he had made himself an integral part of our great NYU Shanghai experiment, and we miss him very much, " said Provost Joanna Waley-Cohen.

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## Top Neuroscientist to Lead Research at NYU Shanghai

Lu Zhong-Lin, a leading neuroscientist widely recognized for his work on computational brain models for perception and cognition this fall became NYU Shanghai's Chief Scientist and Associate Provost for Sciences, as well as Co-Director of the NYU-ECNU Institute of Brain and Cognitive Science.

Lu's broad charge is to develop a strategic vision for NYU Shanghai's transformation into an innovative world-class research university. He will help identify core areas of scientific research, foster multidisciplinary research programs, build strong partnerships between NYU Shanghai and the NYU global network, and seek collaborative opportunities with academic, industry, and other partners.

A native of Hubei province who earned his PhD in physics from NYU, Lu moved to Shanghai from Ohio State University, where he was a College of Arts and Sciences Distinguished Professor of Psychology, and Professor of Psychology, Optometry, and Translational Data Analytics.

## Business and Marketing Students Win National Competitions

Two teams of NYU Shanghai students won national championships in branding and marketing last spring. Echo Ma '19, Lyndsy Qu '19, and Leanne Li '21 together won the all-China Unilever Future Leaders' League (FLL) competition in March with a marketing plan to make an older skincare brand more accessible to Generation Z consumers. The team then represented China at the Global FFL in London the following month. Team Timeless, formed by Angela Zheng '21, Jennifer Tao '21, and Eileen Shiang '21 also represented China at the L'ORÉAL Competition World Finals in Paris, after taking first place in the China competition with their user-friendly digital platform to market anti-aging skincare products.

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# AI Helps Uncover Long–Term Effects of Antidepressants

NYU Shanghai Assistant Professor of Information Systems and Business Analytics Bruno Abrahao and fellow researchers from Georgia Tech, Microsoft Research, and Harvard Medical School have developed an AI-based method to enable mental health practitioners to understand the long-term effects of psychiatric medications. Their research was published in the June 14 issue of the *Proceedings of the Association for the Advancement of Artificial Intelligence*, and won the Outstanding Study Design Paper Award at the International AAAI Conference on Web and Social Media in Munich, Germany.

Adapting a machine learning model originally developed for Reddit posts, the team pinpointed over 23,000 Twitter users whose posts indicated that they were taking any one of 49 popular psychiatric medications and estimated when they began their treatment.

Next, the model found a control group of 280,000 Twitterers who used depressive language and who had similar social media habits, but who were not taking psychiatric medications. Using natural language processing techniques and observations of users' posting behaviors, the researchers analyzed changes in mood, cognition, and thoughts of suicide in both groups in order to track the effects of psychiatric treatment.

The results are striking: posts by Twitter users who took a family of drugs called SSRIs – which includes many of the most popular antidepressants – showed long-term worsening of symptoms including anxiety, depression, psychosis, and suicidal ideation. In contrast, the posts of users who took an older group of drugs called TCAs showed more improvement in depressive symptoms over the course of the study's two-year term.

Although psychiatrists and patients have expressed doubts about the effectiveness of SSRIs for years, Abrahao and his colleagues argue that their research shows evidence of these negative effects in a large population.

The researchers now aim to establish the clinical validity of their approach by surveying some of the users whose posts they tracked. They believe that by combining their methodology with other sources of data and expert input and working on ethical and privacy regulations, their approach may influence best practices in psychiatric medicine.

## Neural Science Researchers Find Brain Region and Process that Turns Decisions into Actions

In a cover article for the journal, *Neuron*, NYU Shanghai Assistant Professor of Neural and Cognitive Sciences Cai Xinying and former NYU Shanghai postdoctoral researcher Man Yi Yim and Xiao-Jing Wang of New York University describe how they located the region of the brain where decisions based on preference are translated into actions – the ventral (lower) section of the lateral pre-frontal cortex, or LPFCv. Cai and his colleagues were able to determine that our decisions about which option to choose are made in a different region of the brain and are made before an action plan is formulated in the LPFCv.

Understanding both the location and the process in which decisions are made and transformed into actions could significantly improve medical professionals' ability to treat social and behavioral disorders. There are also countless ways in which this knowledge could be useful for industries that depend on consumers to make fundamental judgments about goods or services.



## NYU Shanghai Prof Finds Distance Threshold for Reliable Eyewitness Identification

In a study published in July 2019 by the leading journal, *Law and Human Behavior*, NYU Shanghai Professor of Psychology Pekka Santtila and his colleagues determined the minimum threshold for reliable eyewitness identification.

Over 1,500 participants ranging from six to 77 years old watched four people, one at a time, at four distances ranging from five to 110 meters. They were then presented a set of photos, either sequentially or simultaneously, and asked to pick out the people they had seen.

Compared to the rate of correct identifications at five meters, correct identifications fell by 50% at 40 meters, indicating that identification beyond this point is of almost no value. At 100 meters, the accuracy for all age groups became so low that identification results were considered no better than a guess.

Santtila says the findings might be used in criminal trials to cast doubt on eyewitness testimony from beyond the 100-meter threshold.

### Research in Brief

A paper co-authored by the late Professor of Mathematics **Vladas Sidoravicius** and Professor Alexandre Stauffer of the University of Bath titled "Multi-particle diffusion limited aggregation," was published May 20 in Inventiones Mathematicae, one of the most prestigious mathematics journals in the world. The co-authors developed a process that can be used to simulate events such as the spreading of rumors and competition between disease and defense systems.

Associate Professor of Marketing **Yan Dengfeng** won a grant from the Excellent Young Scientist Fund administered by the National Natural Science Foundation of China. The 1.3 million RMB (US$185,000) award will support interdisciplinary research into how consumers' evaluation of numerical information affects their choice of products and services.

Dean of Arts and Sciences **Maria Montoya** has been named President Elect of the Western History Association (WHA), an organization that promotes the study of the North American West. As President-Elect, Montoya will serve on the Executive Committee of the 1,100-member association of historians and scholars and become its President beginning in the fall of 2020.

Associate Professor of History and European Studies **Alexander C. T. Geppert** has been appointed the 2019-20 Charles A. Lindbergh Chair in Aerospace History at the Smithsonian National Air and Space Museum in Washington, DC. He is the first European to hold this position since the chair's creation in 1978. He was also awarded the NASA/Society for the History of Technology Fellowship in Aerospace History in 2018.

*More research news at:*
*research.shanghai.nyu.edu/news*

SNAPSHOT

After 14 weeks' training, 126 students took to the stage for NYU Shanghai's Spring Dance Concert, "Heroes," on May 12. In this photo, Marisol Gallardo '20 performs with classmates from *Choreography & Performance*.

12 sophomores took to the stage on September 11 to perform the 6th annual "Reality Show," an original musical about life at NYU Shanghai created by the students themselves for the incoming first year class. The show tackled themes such as academic stress, homesickness and cross-cultural collision.

Over the summer, several new student lounges opened in the Academic Building. A World Languages Lounge was created to enable small groups of students to gather and practice different languages.

NYU Shanghai students shared food, dance, and music from their home countries at the Student Government's Cultural Expo on February 28. Chancellor Yu, Rudy Song '19, and Feng Zhe '20 pose with traditional Chinese dance props.

NYU Shanghai marks International Women's Day every March 8 with CELEBRATE WOMEN, a photo exhibition of female community members sharing objects of "personal empowerment." Alina Cedeno '21 poses in a traditional Ecuadorian dress. "My strong, hardworking and humble people inspire me everyday to keep going. My beaches, volcanoes, diversity, and culture empower."

This fall, the campus cafe started serving drinks exclusively in re-usable stainless steel cups. The idea came from Assistant Professor Yifei Li, who worked with the cafe and community to reduce the use of paper and plastic. Thanks to an NYU Office of Sustainability grant, 3,000 cups are now in circulation.

In April, our sports teams traveled to Xi'an Jiaotong-Liverpool University (XJTLU) to compete against other Sino-foreign universities in the XJTLU Cup. NYU Shanghai brought home a championship in tennis, second place in men's basketball, and a sportsmanship award in badminton.

# Life, S⚾ftball, and Pseudorandomness

## Avid Softballer and Computer Science Professor Guo Siyao Shares How She Found Her Two Passions



> **Softball has been a big part of my life. It taught me how to have an optimistic and enduring mindset, strive for excellence and fight for my dreams. It also taught me to work with others.**

**By Ma Yida**

Guo Siyao, a native of Hunan province, joined NYU Shanghai in 2019 from the Cybersecurity and Privacy Institute at Northeastern University in Boston, MA. An expert in theoretical computing, Guo's research is essential to improving the security and privacy of telecommunications and the Internet. For Guo, little is more exciting than making a key breakthrough: "To me research is like walking in the dark. At some point, you will encounter a totally new understanding, like a sudden beam of light in the darkness. Everything becomes illuminated in one exquisite moment!"

Besides teaching and research, Guo loves softball and plays on a women's team in Shanghai. "You need total focus in softball, but I also enjoy that feeling of letting go completely." We joined Guo on the softball field at Shanghai Community Sports Club to discuss her research, life in academia, and softball.

**Q: What first drew you to computer science, and what made you decide to pursue a career as a researcher?**

**A:** I've loved math since I was a child. When I was filling in my preferred majors on my university applications, all of my answers were math related – mathematics, computer science, physics, etc. I was later assigned to the computer science department at Beijing Normal University. I had planned to find a way to transfer to the mathematics department in my sophomore year, but after learning how to code and apply algorithms in my first year, and joining some programming competitions, I developed a strong interest in computers. So I stayed. You get a great feeling of accomplishment from realizing your ideas in code.

**Q: Your research interests include cryptography, computational complexity, and pseudorandomness. Can you explain these in layman's terms?**

**A:** These are all subdomains within the field of theoretical computer science, which involves using mathematics to build models of computers, and researching the computing power of computers. Computational complexity studies the computing resources needed to solve problems, such as time, storage space, etc. Cryptography started as a way to conduct private communication in open environments, including the Internet. Now the field has expanded to include electronic currency and blockchain.

There are not enough totally random numbers to meet the encryption needs of long messages, which is why we have the field of pseudorandomness. You can produce a massive amount of pseudo-random numbers based on a small number of totally random numbers, and apply the massive amount of pseudo-random numbers for purposes such as encryption.

**Q: What brought you to Shanghai? And why did you choose NYU Shanghai?**

**A:** I had been studying overseas for a while, and I really wanted to come back to China. I wanted to spend more time with my family. Shanghai is one of the most international cities in China, and NYU Shanghai's open and relaxed international atmosphere has really won me over. Besides the academic environment here, I also really agree with the school's approach to education. My colleagues really value teaching, and I love the small class sizes. The students are bright and lively. It's really enjoyable to teach here. This school has a lot of energy.

Before I arrived here, I didn't believe there was a school out there that would fit me so well, but after being here a semester, I couldn't be happier.

**Q: Why do you love softball?**

A: Softball has been a big part of my life. It taught me how to have an optimistic and enduring mindset, strive for excellence and fight for my dreams. It also taught me to work with others.

I first fell in love with softball when I watched the Japanese anime *Touch* as a child. I was drawn to the teamwork, passion, and leadership I saw in the series. It made me want to create my own softball story.

In college, I joined the women's softball team. My captain was my role model. She spent 5 hours every day training herself to be a pitcher. We had morning training at 6:30 am and practiced about 4-5 hours per day. I kept notes of what I learned and still remember how eager I was to improve.

I continued playing in grad school at the Chinese University of Hong Kong. As team captain and catcher, I even led my team to the China University Baseball and Softball League Finals. After you go through something like that, you're in it for life.

**Q: Do you have any advice for women who want to study computer science?**

**A:** I've been very pleased to see quite a few women in my classes here in Shanghai. I hope I will have been a positive influence, if they eventually choose careers in computer science. I try to give them support when they need it.

I'd tell women who want to learn computer science – don't be afraid, don't set limits for yourself. Get as much information about the situation as possible, and persist in your goal one step at a time. Do what you are able to do to the best of your ability, and you'll be able to do far more than you imagined.



Professor Guo Siyao rounding the bases during a game at the Shanghai Community Sports Club.

# NYU SHANGHAI LIVE

**NYU Shanghai regularly hosts more than 100 events every year in a wide–range of fields, advancing our role as a cultural, artistic and intellectual center in the community. Here's just a sampling of the guest speakers seen and heard recently on campus.**

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I think we're having a Western breakdown in the way we organize our society. The idea that you get together with people of a different view and hammer out a compromise to take things forward seems not to be part of the way that present-day politics is operated.

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—— **Baroness Neuberger, member of the British House of Lords,** the upper House of Parliament, "To Brexit or not to Brexit," March 21, 2019.
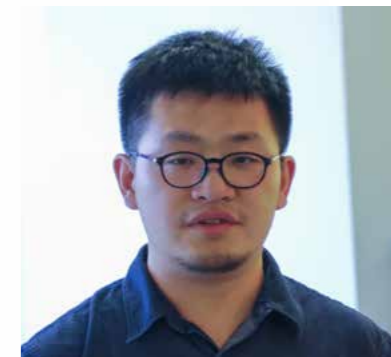
"

We live in a global world now, and translation is not just an aesthetic. It's a political act. The notion of there being a pure language that doesn't change is ridiculous. A language that doesn't change dies.

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—— **Forrest Gander, winner of the 2019 Pulitzer Prize for Poetry,** closed the spring semester's Literary Reading Series by reading from his prize-winning collection of poems, *Be With*, and discussed his work, May 14, 2019.

"

Sino-US relations are like a marriage. The two are deeply intertwined, and they won't easily separate. The cost of a divorce would be enormous.

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—— **Shen Zhihua, Professor of History, East China Normal University,** at the panel, "Retrospect and Prospect of China-US Relations," Feb 13, 2019.

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Kunqu does not belong in a museum. It should be restored to its rightful place in front of thousands.

"

—— **Zhang Jun, the "Prince of Kun Opera,"** shared his love for one of the oldest forms of Chinese opera, which in recent decades has weakened in popularity. He talked about adapting Hamlet for Kun and performed excerpts from the play on March 5, 2019.

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60% of child car seats are made in China but only 1% of those seats are used in China.

"

—— **Cheng Zhiyuan, founder of Makeapoint,** a design-led innovation lab built to facilitate the emergence of businesses and organizations for social good, joined the "Young Entrepreneur" series featuring entrepreneurs from *Forbes China's* 30 Under 30 List, on April 24, 2019. Cheng and others shared personal experiences and lessons learned from their young careers.

# Making Sense of Data

How NYU Shanghai is staying on the cutting edge
of the data revolution in Shanghai – and around the world.

By Kara Baskin and Sarah Elizabeth Bellemare

Can a robot make music that moves you? Can social media help us understand the effectiveness of anti-depressant drugs? Can artificial intelligence predict stock markets?

These questions and many others are being answered by NYU Shanghai students and faculty studying and using the powerful and rapidly-evolving tools of data science.

Every day, billions of Internet-connected devices and services are generating gigabytes of raw data – from what and when people are buying goods, to where they are traveling and how long they are staying, to what topics they are researching at any given moment in time. Never before has humankind been able to amass so much raw data. Never before has humankind had the power to process it.



Enric Junqué de Fortuny, Assistant Professor of Information Systems and Business Analytics, focuses on modeling human-generated data and its applications to business.

Over the past decade, computer scientists, mathematicians, statisticians, and other experts from diverse fields have drawn techniques, such as machine learning algorithms and artificial intelligence methods, as well as specific domain knowledge, to make sense out of the information chaos. The methodology and discipline they've developed – data science – uses mathematics, statistics, and computer science to analyze massive amounts of data collected in fields as diverse as transportation, marketing, anthropology, political science, music and literature – and human behavior.

The insights gained from data science are changing the way we work, play, and socialize, and are also driving innovation in almost all industries, says Dean of Engineering and Computer Science Keith Ross.

"Whether you're working in marketing, R&D, or the finance industry, knowledge about data science is now mandatory in almost every industry," says Assistant Professor Guo Li, who joined the NYU Shanghai faculty after stints as a data scientist for Kelley Blue Book and Taobao.

"Businesses need to make thousands of decisions every day. Acme marketing wants to predict who is going to be interested in its products. A diabetes app will want to do pro-active disease progression prognosis, and a social media company for teenagers needs to know whether someone is lying about their age," says Assistant Professor of Information Systems and Business Analytics Enric Junqué de Fortuny. "These scenarios require making decisions and judgments about humans in environments with many unknowns. Data science reduces uncertainty in such decision-making processes. The promise is that as we complete the (responsible) digital transformation of business and society, consumers will ultimately benefit by getting superior services and products."

## A world of possibilities, sophisticated coursework

It's no surprise, then, that data science has become NYU Shanghai's fastest-growing major.  Since its introduction in 2016, more than one in ten students have declared data science as a primary or secondary major. The university is one of the first liberal arts-centered universities to offer a major in data science at the undergraduate level, Ross says.

The data science program is built on a recognition of the field's interdisciplinary nature. It's simply not enough to master the underlying statistical methodologies and algorithms – data scientists must also master the field to which they are applying the data tools. With nine sub-concentrations such as genomics, artificial intelligence, and economics available to data science majors, NYU Shanghai offers one of the most flexible and wide-ranging

Data science major Kelly Marshall '20 spent his summer vacation working with Dean of Engineering and Computer Science Keith Ross on new algorithms for reinforcement learning.

undergraduate data science programs in the world. To support this interdisciplinary program, NYU Shanghai currently has 12 data science core faculty members, with expertise not only in computer science and mathematics, but also in application domains such as finance, urban planning, and neuroscience, with plans to add new faculty members in social science and data science methodology.

| Data Science Major Concentration Options |
| --- |
| Finance |
| Marketing |
| Economics |
| Genomics |
| Computer Science |
| Mathematics |
| Artificial Intelligence |
| Political Science |
| Psychology |

Kelly Marshall '20, a data science major specializing in AI, says that the ability to go in-depth within the field you want to apply data science methodology is part of what attracted him to the major. Marshall, who is also minoring in Chinese and mathematics, says the two humanities classes he's been able to take along with his data science courses every semester have only strengthened his performance in his major.

"If you see a data science project go terribly wrong, the problem is usually that the designers are trusting computer predictions too much, and they're not applying any sort of domain knowledge whatsoever," he says. "So it's really important that our data science major includes this

emphasis on knowing the subject where you're going to be applying your analysis."

Last summer, Marshall worked closely with Ross writing new algorithms for deep reinforcement learning, an exciting branch of AI that uses neural networks and informed trial and error to find good strategies for sequential decision problems, such as in the control of robots or playing the game Go. Typically, deep reinforcement learning isn't taught at the undergraduate level. But because many NYU Shanghai students have taken advanced courses in probability theory and computer science, they are ready for such graduate-level topics. "Even our introductory machine learning course includes topics that are normally taught at the graduate level," says Ross.

Students say faculty members are supportive – encouraging them to advance as quickly as their interest and ability take them. "I took part in an independent study group on deep learning that Professor Gus Xia organized in my sophomore year. He really piqued my curiosity in class by showing us these incredible videos of his own work with robots and music, and then telling us, 'You can get started learning how to do this right now,'" Marshall says. "[He] made some really complex concepts tangible and accessible, and it was amazing to start working closely with a professor so early in college. That was an experience I never really anticipated having as an undergrad."

## Science without Boundaries

The cross-disciplinary nature of NYU Shanghai's data science program means that faculty research touches almost every facet of the human experience.

Bruno Abrahao, Assistant Professor of Information Systems and Business Analytics, joined researchers from Harvard, Georgia Tech, and Microsoft to analyze

Assistant Professor of Computer Science, Gus Xia, spoke on music intelligence, creativity, and whether artificial intelligence can make people more creative at a panel on "Creativity" at *Zaojiu Talk* in April 2019, a Chinese TED-style idea-sharing platform.

millions of Twitter posts to identify the long-term effects of psychiatric medications on patients. Using a natural language processing approach, the team identified Twitter users who were taking psychiatric medications and created an artificial intelligence model to find patterns in these users' language: Their work received the Outstanding Study Design Award by the Web and Social Media Conference, held by the Association for the Advancement of Artificial Intelligence. They found that posts by Twitter users who self report taking an antidepressant medication showed significant, consistent differences in emotional and cognitive outcomes related to their language before and after they started taking them. "Our study showed that in the future, healthcare providers can use this kind of social media data analysis to improve their real treatment choices and provide more individualized medicine," Abrahao says. (*For more details, turn to page 6*)

Meanwhile, in the Music X Lab at NYU Shanghai, Assistant Professor of Computer Science Gus Xia is training AI musicians to perform collaboratively alongside human counterparts. Using a type of algorithm called representation learning, Xia's AI identifies an individual

musician's patterns of notes, tones, volumes, and tempos and compares them with the many many millions of combinations of notes, timing, and structures embedded in music. Then it produces an accompaniment that fits the human musician's own style. Xia's AI is even capable of improvising, leading its human collaborator in new musical directions.

Xia, a musician himself, hopes that his work will help more people appreciate, perform, and compose music. "It's the perfect way to bridge humanity and technology," Xia says.

Enric Junqué de Fortuny, Assistant Professor of Information Systems and Business Analytics, has focused on modeling human-generated data and its applications to business. "In one study, we analyzed fine-grained behavioral data of millions of subjects and were then tasked with making accurate predictions about those same subjects: Whether they are satisfied with their life, their political inclinations, or whether they would be prone to substance abuse in the nearby future. As it turns out, we can predict such seemingly ephemeral things with surprising accuracy!"

**Check out *musicxlab.com* to see Gus Xia's Music X Lab, and find out more about how computer music makes the world more creative, expressive, and interactive while embracing humanity.**



A "haptic flute" designed by Xia and his students to provide more flexible tutoring methods based on the proficiency of the player.
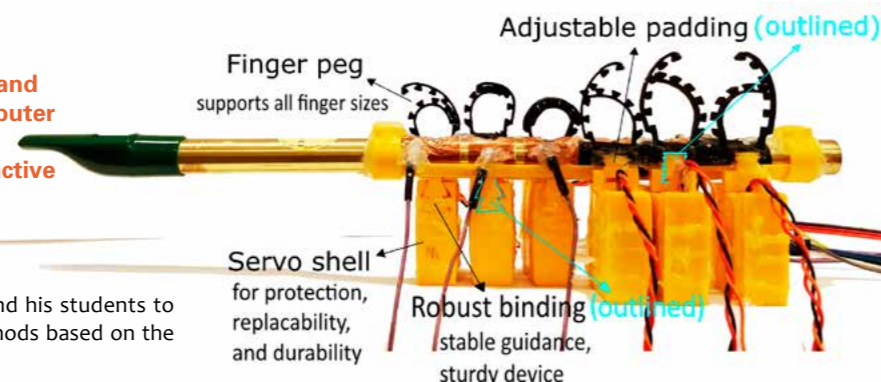
And Guo Li is looking into how statistical analysis and deep learning can be combined to advance facial recognition technology: "I'm working on predicting age and gender based on face images. Since age prediction is an ordinal regression task, it's possible to combine the ordinal regression techniques in traditional statistics with deep learning to see if we can improve the current precision of predicting age and gender."

## Transformative technology in an evolving city

For faculty and students alike, it's not just what's happening on campus that is most exciting about studying data science at NYU Shanghai. The city of Shanghai itself is an incubator for both raw data and advances in the discipline. "There is a lot of investment and interest in AI companies in China, and the start-up scene is booming here. At the same time, the flow of exchange between data sources, academia, and industry is more flexible here than in other parts of the world," Abrahao says.

NYU Shanghai has already found several opportunities to collaborate with high-profile Shanghai-based companies, most recently in the April 2019 Hack the Pearl competition, sponsored by HSBC China (HBCN). Student teams were challenged to leverage real data provided by HBCN to develop models predicting consumers' likelihood of purchasing investment products. Their answers were compared to real outcomes revealed by HBCN, and winners could land internships at the company.

This kind of real-world experience is invaluable and blossoms in a vibrant city like Shanghai, said Junqué



Assistant Professor Guo Li joined the NYU Shanghai faculty in 2019 after stints as a data scientist for Kelley Blue Book and Taobao.

de Fortuny, who served as a judge and advisor in the competition.

"Shanghai, specifically, has transitioned from being a financial and shipping hub to becoming a global technology powerhouse in a matter of mere years. From robo-cocktail bars to AI chip design studios and self-driving vehicles, you name it, and you'll find it being developed somewhere here," Junqué de Fortuny says. "And the only way to truly experience the excitement and pace of it all is to be a part of it. Working at NYU Shanghai has opened my eyes in terms of the impact China's digital transformation is having on its citizens."

Bruno Abrahao, Assistant Professor of Information Systems and Business Analytics, discussing a data science project with students from his Network Analytics class.

# A New Beginning for the Class of 2019

Commencement speaker Peggy Yu advised graduates: "Allow yourself to be confused and allow yourself to make mistakes."

Parents, friends, faculty and students from around the world gathered May 30 to celebrate some 270 seniors hailing from 27 countries, including 140 Chinese students from 26 provinces across China at NYU Shanghai's third commencement ceremony. NYU President Andy Hamilton, Chancellor Yu Lizhong, and Vice Chancellor Jeff Lehman presented the graduates with bachelor's degrees from NYU and NYU Shanghai diplomas at the ceremony, which was livestreamed from the Shanghai Oriental Arts Center to global audiences.

Commencement speaker and Co-Founder of E-commerce China Dangdang, Inc, "Peggy" Yu Yu, Stern '92, encouraged the graduates to take advantage of their youth and explore the world.

"There is an English expression that says 'Youth is wasted on the young.' But in my mind, youth is meant to be wasted on the young," Yu said. "Spend time wandering around, reading, observing, accumulating knowledge, and capabilities. Allow yourself to be confused and allow yourself to make mistakes."

Members of the Class of 2019 will be headed to jobs or graduate schools all around the world, from multinational companies such as Citibank, Amazon, Baidu and IBM to the U.S. Peace Corps and non-profits such as the Institution of New Economic Development in Chengdu.

## NYU Shanghai's Very Own Qilin Mascot Has Landed in the WeChat Sticker Store!

In celebration of the Class of 2019 and all our classes to come, NYU Shanghai – with the help of sophomore IMA majors Skye Gao '21 and Candy Bi '21 – released a set of 16 Qilin mascot online stickers for use across all social media platforms, including WeChat.

This sticker set seeks to capture everyday life for the NYU Shanghai student body: Writing papers, sipping bubble tea, chasing shuttle buses, and working out in the gym. As you venture out into the world, take the Qilin with you as a memento of your time here, and keep our school spirit strong!

The entire set is available to download from the WeChat Sticker store (search '上纽大麒麟') and on Instagram via GIPHY @nyushanghai.

1. Chancellor Yu Lizhong
2. Commencement speaker Peggy Yu Yu
3. Student Speaker Anthony Comeau '19
4. Student Speaker Qu Jiayun '19
5. Torchbearer Liu Tianwei '19

## Global Awards

### First NYU Shanghai Student Awarded Knight–Hennessy Fellowship

One of 68 students selected from more than 4,400 applicants, **Shirley Zhao** is the first NYU Shanghai student to earn a Knight-Hennessy Fellowship, which will fund her master's degree in East Asian Studies at Stanford University. She is also the only winner in 2019 from Mainland China. The Knight-Hennessy Scholarship, co-created by Nike founder Phil Knight and modeled after Oxford University's Rhodes Scholarship, brings together some of the world's most promising college graduates to advance their graduate studies and work together to find creative solutions to complex global issues.

### Congratulations also to:

Savannah Billman '19
Yenching Scholar

Sabrina Ku '19
Fulbright ETA (English Teaching Assistant) Scholar

Lizbeth Pantoja '19
Fulbright ETA (English Teaching Assistant) Scholar

Safia Kariapper '19
Princeton in Asia Fellow

6. Bin Xue '19, Savannah Billman '19 and Jade J Basinski '19 minutes before the start of the graduation ceremony.
7. Jarred Van De Voort '19 and classmates head toward to the Shanghai Oriental Art Center.
8. Li Zeyao '19 and Hu Yunling '19 pose on Century Avenue.
9. Bridgette Williams '19 shows off the message on her mortarboard.

# In and Of the City

## NYU Shanghai Reaches Out to Migrant Worker Communities

By Fei Wu

In a modest building on the outskirts of Shanghai, nearly two hours by subway from the NYU Shanghai campus, Zhu Haoze '22 leads a study group of three high-school aged students. He guides them through the basics of English grammar and parts of speech, painstakingly explaining the difference between a noun, a verb, and an adjective. One boy is particularly enthusiastic and tries to answer every question Zhu throws out with mixed success, while the other two are attentive but uncertain.

"You don't need to know every single tense or usage, but it might be useful later on to be able to express yourself in English," Zhu reassures one of the more tentative boys.

Zhu was a student last spring in *Service Learning with Migrant Families*, a weekly course taught every year by Affiliated Professor of Social Work Xu Qingwen. The course introduces students to theories about childhood development and studies of migrant populations, and enables them to apply their textbook knowledge to volunteer work in various NGOs.

Over the course of their time in Shanghai, NYU Shanghai students are strongly encouraged to engage in community service. Last spring, some 70 of those students chose

to work with the children of Shanghai migrant workers either through Professor Xu's class, or by teaching English through local Shanghai charity, Stepping Stones, or joining the Dean's Service Corps' Art Therapy with Migrant Kids program, which sent students to lead art classes with primary school children.

Shanghai is host to some 10 million migrant workers from across China who come to the city seeking higher pay and better opportunities. Some laborers bring their children with them, but establishing *hukou*, or official residency in Shanghai, is extremely difficult and prevents many from being able to enroll their children in public school.

The center where Zhu was volunteering, the Shanghai Jiuqian Volunteer Center, tries to fill that gap by supporting youth who cannot access Shanghai public high schools or take the nationwide *gaokao*, the university entrance exam. Jiuqian offers alternative paths to success by providing students with English lessons, field trips, and classes in subjects such as coding, biology, and pottery.

"NYU Shanghai student volunteers put their hearts and souls into the classroom, and are constantly thinking of better ways to teach students," said Jiuqian Volunteer Center Director Yao Ruhui. "They also spend a lot of their

free time outside of class talking with our students and building friendships."

A daughter of migrant workers from Anhui province, Interactive Media Arts major Kong Xiaoyan '21 decided to volunteer with migrant children through the Art Therapy program because she wanted to give back. "I received a lot of help from society, so right now, I'm at the point where I'm thinking: Can I do something for these kids as an NYU Shanghai student?"

Mathematics and social sciences double major, Liu Tianwei '19, says that working with the children of migrant workers had affected him both personally and academically. "I had a conversation with my parents about my future recently. They wanted me to do something that would help me find a 'good job' in the future," says Liu. "But after volunteering, I see that there are things I can do to help a group of people, and that's the significance of social work and social services … That's meaningful to me."

Kong says navigating both the glittering high rises of China's first-tier cities as well as the vegetable markets and construction sites in their shadows has given her a unique perspective.

"I've seen both sides. Some really privileged people, they don't go to those places. They think they are living a good life … upscale coffee-shops, comfortable chairs in air conditioned buildings. In a way, it could now be my life, too," says Kong. "But we've got to remember that comfortable people in comfortable places are the ones who actually have a voice, and can actually make decisions that change the situation."
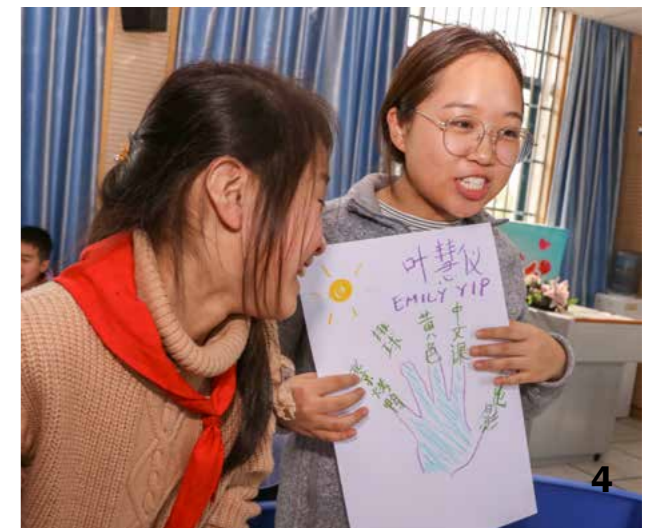
1. Madison Hart '22 and Stella Choi '21 volunteered with the Art Therapy with Migrant Kids program at Tangwan Primary School.
2. Kong Xiaoyan '21 is amused by her students.
3. Youssef Abdelzaher NYU '21 helps his students choose five words to describe themselves.
4. Emily Yi '21 shows students a sample drawing.

# Doing Business With China

By Charlotte San Juan

On Shanghai's famous West Nanjing Road – where by night clusters of neon commercial signs light the way for endless waves of shoppers pouring in and out of storefronts – students from Professor Heini Shi's course, *Doing Business With China*, are in the middle of class.

They've just finished touring Space, a music and fitness studio backed by the Alibaba Group located in a mall adjacent to the world's biggest Starbucks. The high-tech studio serves nearby office workers and fitness addicts seeking to spice up their routine with classes that combine strength training, barre, cycling and yoga with music.

On floor mats and lounge couches, Professor Shi's class surround Space co-founder William Hsieh, NYU Stern '00, who shares the realities of owning, operating and branding a business enterprise in China. They discuss the company's struggles, successes, and the trend for foreign companies to partner with well-established local organizations rather than establish themselves as "WFOEs" or "Wholly Foreign-Owned Enterprises."

"Hsieh's gym has several locations – in Taipei, Beijing and here in Shanghai – and he explained how important it is to gather the right people in different roles in order to confront legal and operational struggles companies face," says Nicholas Yiu '20 a current student at NYU Gallatin. "One of the greatest takeaways of this visit was that it's difficult to set up and run a business in China, you really need to have a good strategy and learn the tricks."

Opportunities to meet with real-life practitioners like Hsieh and to tour businesses of all sizes – from local startup accelerators to multinationals such as Coca Cola, IKEA, and DowDuPont – are a regular feature of one of NYU Shanghai's most popular 4-credit undergraduate business courses.

"You get to go outside – not only out of the classroom but also out of your comfort zone in order to indulge, understand, and network  – which is fundamental for conducting any type of business within or outside China," says Paula Dale '18, who currently works for JP Morgan in New York City.

A former officer at the World Bank and the United Nations, Professor Shi brings a cross-cultural and cross-disciplinary approach, touching upon history, philosophy, economics, political economy, and sociology, to helping students understand China's business ecosystem, and China's impact on the global economy.

"To succeed in the business world requires a sensible understanding of global and national politics, economics, and cultures," Shi says.

In addition to site visits and C-suite guest speakers from companies such as Maserati and Alfa Romeo, Silicon Valley Bank, New Development Bank, Ernst & Young, and United Family Healthcare, the class delves into actual case studies of Chinese and international enterprises. Last year, the class studied the venture of Uber, a leading mobile transportation platform, and innovative marketing strategies of a state-owned pharmaceutical company Yunnan Baiyao Group.

Professor Shi Heini takes students to visit Swire Coca-Cola at the Jinqiao neighborhood in Shanghai.

"Most students start off having no idea about the roots and singularity of China's complex commercial environment," says Liu Zhuoen '18 who now works as a marketer for the travel company WildChina. "It is through these real-life cases and often overlooked details that Professor Shi has really demonstrated  ideas of 'making students learn about China, its market, and business practices.'"

"Analyzing how companies in China are managed gives us a new awareness of maintaining a business enterprise," says Seung Ick Chang '20. "And learning about Chinese customs and relationships with people will help us think and negotiate differently with Chinese counterparts while doing business with them."

Shi says the course is ideal for junior and senior students regardless of major, since the principles behind doing business can be useful beyond profit-making activities and help to guide many human activities that require soft skills. "All the students that come to NYU Shanghai have a relationship with China – Chinese national students were born here and international students chose to study here, so they benefit from this course no matter which major they are in," she says. "Gaining knowledge is just part of the objective; how to learn is what students truly take away from this course."

Illustration: Leon Fenster

Zheng Bo, *Pteridophilia 4*, 2019. Video (4K, color, sound); 16 min. Courtesy of the artist and Edouard Malingue Gallery.

# Institute of Contemporary Arts Provides New Venue for Artistic Collaboration

**By Sarah Elizabeth Bellemare**

After a two-year hiatus, NYU Shanghai's art gallery opened October 10 with a new name, the Institute of Contemporary Arts (ICA), and a new exhibition, *Goldenrod*, featuring works by Hong Kong-based artist and educator Zheng Bo. The three-part exhibition – including several works co-created by Zheng and NYU Shanghai community members – highlights the institute's focus on collaborative research and experimentation in the arts. Gallery director Michelle Yeonho Hyun, has reimagined the ICA as a "research center" where visitors do more than just view art – they help develop and employ it as a medium for the exchange of ideas.

*NYU Shanghai Magazine* sat down with Hyun and Zheng Bo to talk about the ICA's new direction and its inaugural exhibition.

**Q: Shanghai is well-known for its art scene. How did you imagine the ICA within this context, and within the context of the university?**

**Hyun:** In Shanghai, you have a lot of great private museums and a flourishing commercial gallery scene, but there are not a lot of spaces that can allow artists to really take risks. As an artist, you need to be able to diverge from the initial idea behind a work or collaboration – you need to be able to experiment.

We really wanted to create a unique transdisciplinary, research-oriented arts program that meshes with NYU Shanghai's identity as an institution for education, research, and public engagement. So the two main questions that I think the ICA Shanghai will ask any of our artist collaborators are: "What are you working on now?" and "What do you want to make next?"

**Q: Why focus on "contemporary" arts here at NYU Shanghai?**

**Hyun:** In the contemporary arts, we have the space to create works that may not look the way we initially thought they would, or that may not be received in the way we anticipated. Contemporary art also moves between different disciplinary concentrations, in much the same way as our lives and identities move between different tracks. So it explores the spaces between the niches and crevices that can come to define us in an educational institution.

**Zheng:** I think for me, art provides a holistic sphere to think about issues that cannot be addressed by specific disciplines. It's a space to think about these questions that are very difficult to define, yet are very important and which require us as humans to use all our faculties and capacities to wrestle with them.

**Q: Tell us more about *Goldenrod*. What is the exhibition named for?**



In 2019, NYU Shanghai's art gallery reopened to the public with a new mission and reinvigorated vision as the Institute of Contemporary Arts at NYU Shanghai (ICA).



Installation View: Zheng Bo, *72 Relations with Canadian Goldenrod*, 2019. Photo: Hong Xiaole.

**Zheng:** *Goldenrod* features two works by me – a film series called *Pteridophilia* and a new drawing that I created just for this exhibition – as well as a collaborative project called *Eco-Socialist Garden, NYU Shanghai* (《生态 – 社会主义园，上海纽约大学》) that was created in a workshop with NYU Shanghai community members, philosophers, ecologists, landscape architects, and other artists.

The whole exhibition is named for the Canadian goldenrod, which is a weed that is probably the most ubiquitous plant species in Shanghai. It's kind of on the bottom of our plant hierarchy, but it's also everywhere, so it's also the most visible. It's important for people who leave the exhibition to all of a sudden see these plants everywhere in their lives, to change our everyday practice.

**Q: Michelle, why did you select Zheng Bo's work as the ICA's opening exhibition?**

**Hyun:** To reopen with an artist like Bo is hugely symbolic. His practice has a great deal of synergy with university art galleries as places for experimentation and research. Bo's work embodies a different relationship with knowledge – he doesn't purport to be an expert. Bo is very open to being the one who is learning rather than teaching. His workshop to create *Eco-Socialist Garden, NYU Shanghai* is a great example – the idea is to bring different people and collaborators together to generate art on a co-equal level.

**Q: What's next for the ICA after *Goldenrod*?**

**Hyun:** *Goldenrod* launches our first two-year artistic research program which is called "The (Invisible) Garden." It's going to include projects with collaborators from all over the world.

Our programming is not just going to focus on visual arts – it's more broad and inclusive of other forms or art and other sensibilities. Ultimately, the research cycle of "The (Invisible) Garden" looks at gardens as places for experimentation, but also as a way to sort through how our understanding of nature has been handed down to us through many different means. We want to inquire into the garden, not just as an aesthetic form for the "display" of nature, but a meaning-making method and process that construct our relationship to so-called Nature.

*To learn more about the Institute of Contemporary Arts at NYU Shanghai and its featured artists, visit ica.shanghai.nyu.edu.*
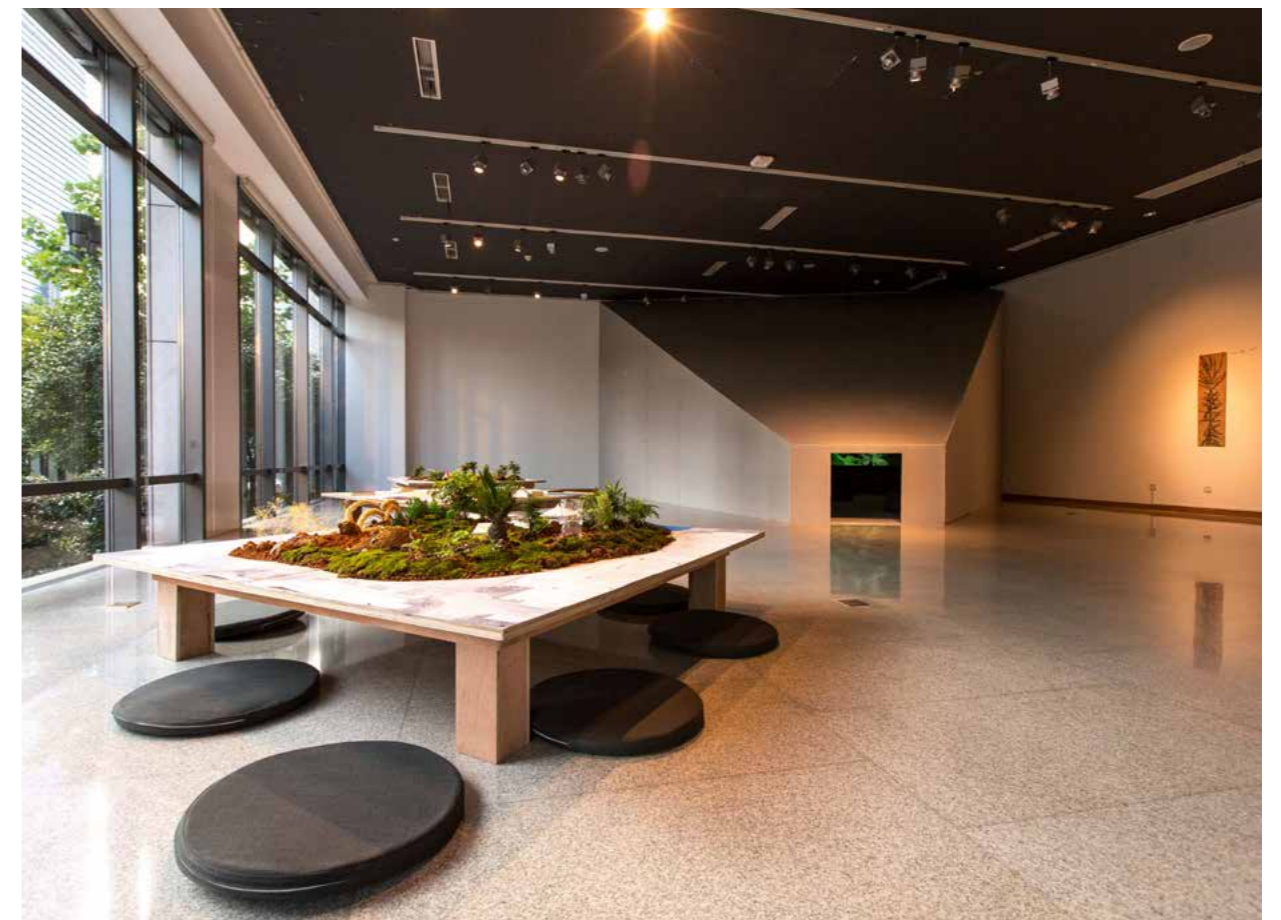


Installation View: *Goldenrod, an exhibition by Zheng Bo*. ICA at NYU Shanghai, 2019. Photo: Hong Xiaole.

# Shanghai Turns Over a New Leaf in Waste Management

**by Yifei Li**

Trash has been the talk of Shanghai lately. Under the city's ambitious new waste classification scheme which went into effect on July 1, everyone is summoned to action. All residents must separate trash into four categories: dry garbage, wet garbage, recyclables and hazardous waste.

Environmental rationales behind the policy notwithstanding, the vast majority of residents consider Shanghai's waste management strategy onerous, as it requires significant modifications in everyday behaviors. Not only must citizens sort their trash, they can only dispose of waste at certain hours of the day.

To many, the categories seem unintuitive – few people understand what the city calls *shi la ji*, or wet garbage, which the city has defined as a combination of compostable kitchen and garden waste.

The widespread sense of burden emanates from the fact that Shanghai's new policy was introduced as an isolated mandate, without tackling the larger context of urban life that has given rise to increasing volumes of waste. Whether it's the convenience of *waimai*, where the cheap containers and plastic utensils are used just once and tossed immediately into the garbage, or the culture of conspicuous consumption, especially at the dinner table, that results in an unconscionable amount of food waste, Shanghai residents generate shockingly large volumes of waste: Nine million metric tons of household waste was recorded in 2018, an eightfold increase from 1.08 million tons in 1978.

In other words, an average household discarded more than 4.5 kilograms of trash every day in 2018. By contrast, in New York City, an average household discarded close to 2.5 kilograms a day in 2017.

The need for intervention in Shanghai is unmistakable, but the main problem with the current approach is that it only addresses one aspect in the "tail end" of the waste challenge – how citizens throw things away. Without a doubt, it is an admirable start, but that's all it really is: a start. The "front end" needs to change, too. Producers need to take on the responsibility of designing their products for durability. Marketization of biodegradable products needs to advance quickly to catch up with the demand. The "middle tier" needs to change also. The alternative economies of thrift-shopping, handicraft-making and local-sharing need to be revived to the glory they once enjoyed under socialism. Finally, changes in the "tail end" need to expand beyond the point of garbage disposal. Community composting would make far more ecological sense

than hauling "wet trash" to a centralized incinerator.

The government of Shanghai cannot afford to act on its own. The whole suite of changes outlined above calls for an all-hands-on-deck moment where private citizens, community groups, businesses, scientists, professional associations, and all other actors work together. The city needs to harness the creativity, support, knowledge, passion, and goodwill of its citizens. In the end, getting broad-based buy-in is key to policy success.

For now, the residents of Shanghai have every right to feel that the new waste classification scheme is burdensome and counterintuitive. However, as the city begins to take on the various causes of the urban waste problem in partnership with groups in society, the four waste categories will cohere better with common sense. In fact, it is precisely our common sense of waste that needs changing. We, as residents, can be part of the change.

*This story draws from the author's forthcoming book,* China Goes Green, *co-authored with Professor Judith Shapiro of American University.*

At commencement, Vice Chancellor Jeffrey Lehman told graduates to keep up those habits that nourish creativity, including "reading tons of books, at least six each year, regardless of whether they are fiction or nonfiction, biography or fantasy." Here, Lehman shares six books that shaped his thinking and understanding of the world in 2019:

### 1 Being Mortal (2014) Atul Gawande

An eminent brain surgeon, Atul Gawande argues that changes in medical technology and social structures require us to rethink how medical professionals, friends, and family interact with people nearing the end of life. Gawande invites us to reflect on how to become "the authors of our own lives," to exercise our autonomy in ways that help other living beings and that serve a larger cause than just our friends and family.

### 2 Stand Out of Our Light (2018) James Williams

After working for ten years on search advertising at Google, James Williams left the industry to pursue a doctorate at Oxford, studying the intersection of philosophy, ethics, and technology. In this book, he argues that "information" is no longer scarce, but "attention" is. Media today leaves us too distracted to consider what we want to do at any given moment, what kind of people we want to be over time, and what goals and values we wish to advance. He argues in favor of a new ethics of advertising and design that can help restore a meaningful "freedom of attention."

### 3 Straight Talk on Trade (2018) Dani Rodrik

Distinguished economist, Dani Rodrik presents a powerful alternative to the widespread belief that, although free trade inevitably leaves some people worse off, it is invariably better for humanity as a whole. This view, which Rodrik calls "hyperglobalization," under-appreciates the value to humanity of having very different nation-states serving their citizens in very different ways. He argues for a system of global governance that respects the primacy of nation-states, facilitates fair trade among them, and uses a light touch to nurture the kind of global consciousness we need to address today's truly transnational challenges.

### 4 The Age of Surveillance Capitalism (2019) Shoshana Zuboff

Shoshana Zuboff is a social psychologist, one of the foremost scholars of the digital revolution. In this book, she explores how competitive markets have created a world in which businesses are rewarded for gathering more and more detailed information about each of us, developing sophisticated ways of predicting our behavior, and creating ever more powerful mechanisms to modify our behavior without our noticing. The result is a frighteningly dangerous world, where our freedom is imperiled not by public power, but by the power of concentrated, technologically enabled, private enterprises.

### 5 Figuring (2019) Maria Popova

Maria Popova is renowned for her distinctive and provocative blog, *Brain Pickings*. This book considers what it means to attain "completeness of being" by exploring the complex and overlapping personal and professional lives of astronomer Maria Mitchell, journalist Margaret Fuller, sculptor Harriet Hosmer, poet Emily Dickinson, and naturalist Rachel Carson. Popova considers the significance of love, loss, creativity, and how people can, during their brief lives, find a way to meaningfully "belong to the world."

### 6 The Making of a Justice (2019) John Paul Stevens

I served as a law clerk to Justice Stevens during the eighth year of his thirty-five year tenure as a Justice on the U.S. Supreme Court. This book of his memoirs was published just two months before he passed away this summer, at the age of 99. The book is of special interest to lawyers and legal scholars, but I believe any educated person would benefit from reading the first hundred pages. They offer a fine sense of what an exceptional and inspiring man Justice Stevens was – brilliant, humble, generous, gentle, and funny.
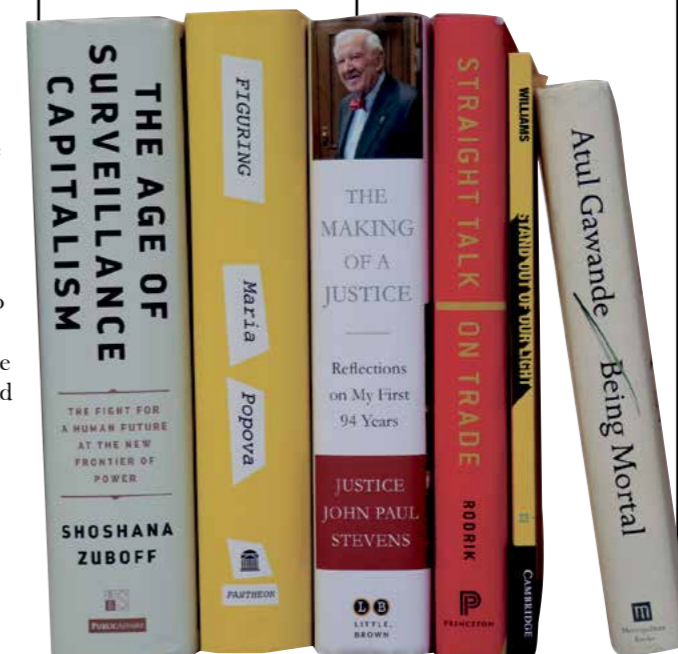
# Frank Zhou '21 and Justin Zotos '21

Frank and Justin have been roommates since freshman year. The pair roomed together again this fall as study away students in New York. Having spent Chinese New Year with Frank's family, Justin took Frank to Chicago for Thanksgiving with his family.

**Frank Zhou '21**
**Hometown:**
Yangzhou, Jiangsu Province
**Major:**
Data Science
Economics

**Justin Zotos '21**
**Hometown:**
Chicago, Illinois
**Major:**
Business and Marketing
Global China Studies

Interview: Charlotte San Juan  Photo: Chen Qianyi '21

## Choosing NYU Shanghai

**Justin:** I lived in Singapore until high school and then moved back to Chicago. I didn't realize how awesome the cultural experience I had growing up was until I didn't have it anymore. I came to NYU Shanghai to be back in a multicultural community.

**Frank:** When I came for Candidate Weekend, I felt this college was so cool. I've made so many friends and experienced so many amazing cultures.

**Justin:** What really sticks out about NYU Shanghai are the people. How everybody really tries their best to understand cultures. They care about careers, they care about school. But they also care about other people. People here just get it. That's what makes it the best school in the world.

## Helping Each Other

**Justin:** Freshman year, Frank was worried about his English and I was worried about my Chinese. We made this pact to practice with each other. That was one of our defining moments. We set goals for each other and helped each other accomplish them.

**Frank:** When we moved in, we had to sign a roommate agreement. There was space to add whatever we wanted.

Justin wrote: "We will love each other." I was so moved. We don't need any other agreement, prohibitions, we just need to love each other. And you know, we can work this out.

**Justin:** Frank is the hardest working guy I've ever met. He'll spend all day getting his work done. I was not like that at all. He taught me the importance of waking up early, getting a breakfast, and now I have a lot more time to get stuff done. Right now, my GPA is its highest, ever. All because he's making sure that I'm doing okay.

**Frank:** Justin is such an outgoing guy. He has a lot of friends. One of my goals was to hang out with friends a lot more, meet different people, and try to go out more.

## Roommate Traditions

**Justin:** We connected over our love for superheroes. Every superhero movie that comes out, Frank and I will go see it together. We went to the midnight release of *Avengers Endgame* in China.

**Frank:** We like to eat. We will recommend different restaurants to each other.

**Justin:** The first time we really hung out was at this Peking duck restaurant. I remember he ordered duck heart. That freaked me out but it was not bad.

**Frank:** When we ate hot pot, you ate a little bit of pork brain, right?

**Justin:** One of my goals when coming here was to never turn away new foods. Frank has definitely pushed my limits that's for sure, but I'm very thankful for it.

**Justin:** I've got some really great places lined up for you in New York.

**Frank (smiling):** I will have a hot dog in Chicago – and I will definitely put some ketchup on it.

**Justin (shaking his head):** No, no, no! In Chicago, you cannot put ketchup on hotdogs if you are above the age of 10. I'm making sure Frank has street cred.

周忠文（Frank）
**家乡：**
江苏扬州

**专业：**
数据科学
经济学

**Justin Zotos**
**家乡：**
美国芝加哥

**专业：**
金融学
世界史

采访：Charlotte San Juan  图片：2021 届 陈芊伊

# 好室友 好朋友

## 2021 届周忠文 和 Justin Zotos

周忠文（Frank）和 Justin 从大一开始就是室友，2019 年秋季学期，两人均选择去纽约进行海外学习，并且继续当室友。自从和 Frank 一家人共度春节之后，Justin 这次带着 Frank 去芝加哥见自己的家人，一起庆祝感恩节。

### 为何选择上海纽约大学？

**Justin:** 从 1 岁起到高中时期，我一直在新加坡生活。直到搬回芝加哥我才意识到，能在一个不同的文化环境中成长是一段多么难能可贵的经历。所以我选择来到上海纽约大学，继续我的多元文化探索之旅。

**Frank:** 来参加校园日活动时，我就觉得上海纽约大学是一所非常棒的学校。我在这里交了很多好朋友，体验了不同的文化。

**Justin:** 上海纽约大学的最特别之处在于这里的人。每个人都尽其所能地接触、理解不同的文化。大家都很重视自己的职业发展和求学道路，但也很关心身边的人。正是这些可爱的人，让上海纽约大学成为了世界上最棒的学校。

### 互帮互助

**Justin:** 大一的时候，Frank 很为他的英语发愁，我也很担心自己的中文，所以我们就搭档练习。我

们会给彼此制定学习目标，并互相督促完成学习任务。这段经历加深了我们之间的友谊。

**Frank:** 刚搬进宿舍的时候，我们需要签一份室友协议，上面有一个空白处可以写下任何想说的话。我看到 Justin 写着："我们会成为一家人。"当时我非常感动，我觉得我们不需要再有其他任何协议或规定，只要我们互相关心、互帮互助，就可以解决所有的问题。

**Justin:** Frank 是我见过的最用功的人，他可以一整天时间都专注学习。而我完全不是这样的。他教会了我早起早睡和吃早饭的重要性，养成这个习惯后，我感觉自己的时间也多了起来。我目前的 GPA 成绩达到了有史以来的最高水平，这多亏了 Frank 的帮助。

**Frank:** Justin 性格随和，很好相处，朋友也很多。我之前给自己定下的一个目标是要多和朋友们交流。所以，我尝试更多地参加活动，结识了很多新朋友。

### 室友生活

**Justin:** 超级英雄是我们友谊的催化剂。每当有超级英雄电影上映，我们俩都会一起看。我们看过《复仇者联盟：终局之战》的中国午夜首映。

**Frank:** 我们都是"吃货"，会互相推荐餐厅。

**Justin:** 我们第一次一起出去吃饭，吃的是北京烤鸭。Frank 还点了一道鸭心，刚开始我不敢吃，但尝了一下发现还挺不错的。

**Frank:** 记不记得我们有一次吃火锅，你还吃了猪脑？

**Justin:** 来上海纽约大学之前，我给自己设定的一个目标是要勇敢尝试各种新食物。在我的美食探索道路上，Frank 一直鼓励我挑战自己的极限，我很感谢他。

**Justin:** 我已经列好了去纽约之后要带你吃什么。

**Frank（笑）：** 我还要去芝加哥吃热狗，而且一定要放番茄酱。

**Justin（摇头）：** 什么？不行！在芝加哥，任何一个 10 岁以上的人吃热狗都不加番茄酱，你得入乡随俗。