

## FEATURED STORY

### GEC Academy Announced GCD Project 2.0 at the Shanghai Training Conference for Chinese Universities

On March 25th and 26th, with an aim to share best practices and achievements in the Global Competence Development (GCD) course implementation, as well as exchange ideas and experiences in internship and practice programs among Chinese universities, the Training Conference on GCD Project for Chinese Universities was held in Shanghai. Organized by the International Competence Development Committee in the Chinese Society of Educational Development Strategy (CSEDS) and co-hosted by the UNESCO Teacher Education Center at Shanghai Normal University and GEC Academy, the two-day event brought together more than 90 representatives from 46 Chinese universities who have implemented the GCD Project.



People attending the Shanghai Training Conference on GCD Project for Chinese Universities

The [GCD Project](#) was co-developed by the GEC team and the International Competence Development Committee, aiming at cultivating students' awareness and competence in creating a harmonious and collaborative global community that values diversity and promotes mutual learning through various teaching methods, including case studies, real-life project and thematic workshops. Currently, 46 universities have enrolled in the GCD Project, representing an important step forward in preparing students for successful future studies and careers in the global marketplace.

During the conference, representatives from 18 universities exchanged experiences in offering GCD courses at their schools, discussed students' achievements, and offered suggestions for future improvement. They also exchanged ideas on how to organize internships and practices that enhance students' global competency in a more practical way. Additionally, 9 members of the GCD Project teaching team, including former senior officials from international organizations, discussed key challenges and difficulties in developing global competence among university students and proposed to add specialized workshops to the curriculum.

Together with the International Competence Development Committee, GEC Academy announced an upgraded version (2.0) of the GCD course, expanding on business skills training and adding courses in psychology and career planning, with an aim to support students in better preparation for future work at international organizations.

During the conference, Mr. Ning Zhang, President of the International Competence Development Committee in the CSEDS, provided a detailed introduction to GCD Project 2.0, which was developed based on feedback from universities that offer the course and extensive interviews and surveys with students interning at international organizations. The updated version of the course covers a wider range of business skills training and includes additional courses on psychology and career planning. These changes were made with the intention of providing better support to students as they prepare for their future work in international organizations.

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*Mr. Ning Zhang introducing GCD Project 2.0 in detail*

Three members of the GCD Project teaching team, including Mr. Changchui He, former Deputy Director-General of the United Nations Food and Agriculture Organization, Mr. Genxin Li, former Legal Advisor of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization, and Mr. Yuxue Xue, former Resident Representative of the United Nations Development Program in Afghanistan and Director of the National Bureau in Indonesia, unveiled their design philosophy of four specialized workshops. These four themed workshops - International Organization Project Management Workshop, International Organization Conference Workshop, International Organization Document Writing Workshop, and International Organization Protocol Workshop - offer targeted theoretical lectures and practical training to provide more specific guidance for students on the real-life problems they will face when working in international organizations.

In addition, seven internship and practice programs were announced with the aim of better meeting students' practical needs and enhancing teachers' international competence. These include a specialized workshop to celebrate the 200th anniversary of The Lancet journal, a museum-based research and study workshop, as well as a workshop for teachers and students from both domestic and overseas universities.

During the following roundtable meetings, six universities, including Tsinghua University, Peking University, Zhejiang University, Wuhan University, Nankai University, and Beijing Foreign Studies University, shared their accomplishments and expertise in devising and executing a diverse array of training activities both on and off campus. By capitalizing on their individual strengths and leveraging available resources, these institutions have achieved remarkable success in implementing effective programs.

Moving forward, GEC Academy will not only continuously update and develop the GCD Project based on universities' feedback but also strive to assist students in finding more internship and practical opportunities, with an aim to promote international cooperation, understanding, and academic exchanges in international organizations.

Over the past two semesters, several GEC teaching faculties have served as instructors for the GCD Project. The knowledge and expertise that they have brought to the project have been instrumental in ensuring that students are well-prepared to enter the workforce upon graduation. For GCD Project 2.0, GEC anticipates even greater inspiration and support from our faculty members. Collaboratively designed pre- and post-course assessments by the GEC team and our expert committee have demonstrated a significant impact on students' competencies and learning opportunities. We welcome additional overseas experts to join us in cultivating students' awareness and competence in respecting diversity, embracing mutual learning, and fostering a harmonious coexistence of humanity. If you are interested in learning more about this initiative, please contact [Wendy Wang](mailto:Wendy.Wang@gecacademy.com) at [wendy.wang@gecacademy.com](mailto:wendy.wang@gecacademy.com).



*Roundtable meetings at the conference*

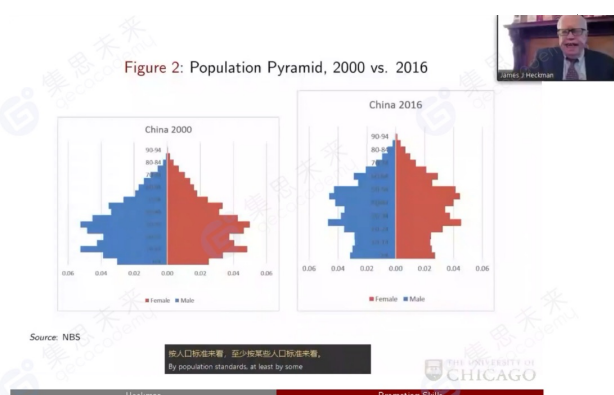
## FEATURED STORY

### GEC Held the 2nd GEC Global Top Scientists Forum with Nobel Laureate Prof. James J. Heckman

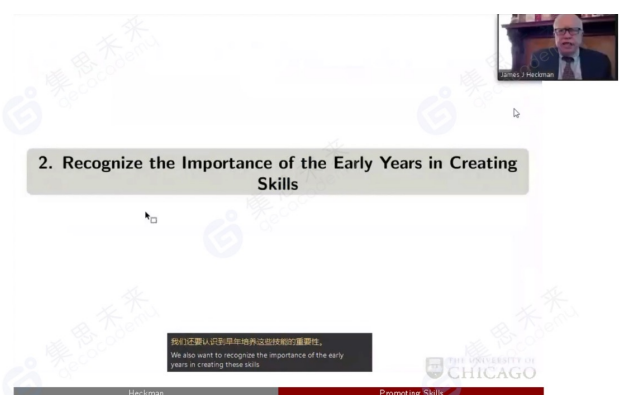
The 2nd GEC Global Top Scientists Forum, organized by GEC Academy, was held online on March 20th. Covering topics such as biomedicine, bioelectronics, chemistry, applied physics, electronic engineering, business, etc., the Global Top Scientists Forum series, launched at the end of 2022, is an initiative aiming at promoting cross-cultural exchange and collaborative research while helping Chinese university students expand their research horizons and sharpen their scientific sense.

With a theme of “Promoting Skills to Promote Social Mobility”, the event emphasized the importance of individual economic value through skill acquisition and potential development. It featured a speech given by Nobel Laureate Prof. James J. Heckman, Professor in the Harris School of Public Policy and Director of the Center for the Economics of Human Development (CEHD) at the University of Chicago, who during the forum shared the insights in his paper “Economics of Human Development and Social Mobility”, published on Annual Review of Economics in 2014. Over 5,000 undergraduate and graduate students from 60 top universities in China participated in the event.

Before his speech, Prof. Heckman first gave a warm welcome to all the students and scholars who joined the forum. He started his presentation by discussing the opportunities and challenges that China may face in terms of its socio-economic development. He highlighted China's economic structure, demographics, and vast population as instrumental in driving its impressive economic growth over the past few decades. He also pointed out potential challenges, such as environmental issues and income inequality, which require immediate attention. In particular, he drew attention to the worsening income gap between urban and rural areas in China and emphasized the need for measures to promote educational equity and equal economic opportunities.



Prof. Heckman compared the population pyramid of China while discussing its socio-economic development in the past decades.



Prof. Heckman explaining non-cognitive characteristics in early childhood

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In addition, Prof. Heckman highlighted non-cognitive characteristics such as physical and mental health, perseverance, motivation, self-confidence, and socio-emotional qualities in transforming various aspects of life. He also discussed how skills gained and learned in early childhood can have significant impacts on employment and earning prospects, as well as overall health.

Followed by the discussion session, Prof. Heckman ended his sharing by emphasizing that improving the early lives of disadvantaged children through predistribution is more effective than simple redistribution in promoting social inclusion and economic efficiency.

Students from different universities contributed to the discussion session moderated by Mr. Edison Yan, President of GEC Academy. Participating students asked Prof. Heckman about how to overcome obstacles brought by AI and how to effectively maximize its potential to enhance learning. Prof. Heckman emphasized that AI can be used as a tool to develop effective learning systems and track children's growth but also highlighted the importance of human skills such as social and emotional intelligence, suggesting that "AI is not a rival, and children who are better trained and better equipped can face it and take it in a way that would be constructed so that it can be used wisely."

Students also explored whether new technologies like renewable energy can improve people's lives. Prof. Heckman stated that while new technologies may bring opportunities for those who adapt to them, they may also exacerbate inequality in younger generations in the long term.

Mr. Yan also had a discussion with Prof. Heckman about the development of online education resources. According to Prof. Heckman, online education can help alleviate the inequality faced by many students who cannot access quality education due to various reasons. However, he also stressed the importance of offline interaction for teaching and the need to focus on the quality of offline teaching and teacher training.

### • What's Next

After several months of planning and organizing, GEC announced the Global Top Scientists Forum series by the end of 2022 to be open to all GEC students and partner institutions. The first forum in the series held in December 2022 featured a lecture by Prof. Randy W. Schekman, 2013 Nobel Laureate in Physiology or Medicine and Professor of Molecular and Cell Biology at the University of California, Berkeley on "Secretory Pathway: How Cells Package & Traffic Proteins for Export." On April 19<sup>th</sup>, the next event will take place in-person at the campus of Imperial College London. Prof. Joshua Edel, Professor of Biosensing & Analytical Sciences at Imperial College London who has been working with GEC for years, will give a speech on "Biosensing in Early Diagnosis and Screening of Diseases."

Moving forward, GEC Academy will continue to invite renowned global scientists, esteemed international award winners, influential humanitarians, and accomplished professionals, including GEC's teaching faculty to present the latest cutting-edge technologies and share their extensive knowledge in humanities across various fields with Chinese university students. For those who might be interested in working with GEC, please feel free to contact our outreach specialist Katrina at [katrina.wang@gecacademy.com](mailto:katrina.wang@gecacademy.com). For GEC faculty who might be interested in giving a speech at our next **Global Top Scientists Forum**, please contact your academic manager.

## Invitation to Global Top Scientists Forum at Imperial College London!

We are delighted to invite you to **GEC Global Top Scientists Forum lecture series at Imperial College London.**

Co-organised by GEC Academy and Imperial College Chinese Students & Scholars Association, the lecture of this month will start on **Wednesday, April 19, 2023, at 20:15-21:15 (Beijing Time)**  
**Room B10, Chemistry Building, White City, Imperial College London**

with our guest speaker **Dr. Joshua Edel**, Professor of Biosensing & Analytical Sciences in the Department of Chemistry, at Imperial College London, discussing "**Biosensing in Early Diagnosis and Screening of Diseases**".

For online participants,

**Join Zoom meeting** <https://us06web.zoom.us/j/89744270221>

**Meeting ID: 897 4427 0221**

**Here** is a tool for time zone converting.

Please find **RSVP** here!



 集思未来  
 帝国理工

**Global Top Scientists Forum**

**Biosensing in Early Diagnosis and Screening of Diseases**

生物传感在医学诊断与疾病筛查中的应用研究

**Onsite Lecture at Imperial College London**

**Joshua Edel**

- The leader of the Research Group focusing on Single Molecule Detection
- Awarded the ERC Consolidator Grant related to the biosensors
- Awarded Research Fellowship at Harvard University's Rowland Institute

**Imperial College London**  
Professor of Biosensing & Analytical Sciences

**Host** GEC Academy  
Imperial College Chinese Students & Scholar Association

Prof. Joshua Edel received his PhD on the development of single molecule detection within microfluidic systems at Imperial College London in 2003. He then performed postdoctoral research in nanobiotechnology at Cornell University within the School of Applied and Engineering Physics. In 2005 he was awarded a research fellowship in single molecule biophysics at the Rowland Institute at Harvard University. In July 2006 he joined Imperial College London within the Department of Chemistry and Institute of Biomedical Engineering as a lecturer. Joshua is currently a Professor in the Department of Chemistry and in 2011 he was awarded a prestigious ERC Starting Grant on “Nanoporous Membranes for High Throughput Rare Event Bioanalysis” and in 2016 he was awarded an ERC Consolidator Grant related to the development of selective single molecule biosensors.

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Invitation to  
2023 April  
Faculty  
Meeting

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## Dear GEC Faculty,

Dear GEC Faculty,

For our next Faculty Seminar (**April 27th, Thursday, 22:00-23:00, Beijing Time**),

As you all may be aware, for the first time since the pandemic, GEC Academy is organizing the largest on-site camp this upcoming summer, which is called **GEC Summer Research Program**. It is one of the most significant events for GEC Academy, and we are trying to bring together around 100 professors from all around the world and have hundreds of students participate in the GEC onsite research seminar, studying, collaborating, and bonding together in the same room.

In this seminar, we will go over our Summer Research Program in-depth, and as we have previously hosted successful in-person programs before the pandemic, we are delighted to invite some of our professors to share their experiences with on-site camps at GEC Academy to give you a better idea of what to expect. We do hope that you will be able to attend this Faculty Seminar as well as being one of our instructors this upcoming summer!

Once again, a grand welcome to you all to attend this month's seminar.

For participants, please find [RSVP](#) here!

### Here is the Zoom Meeting link:

Join Zoom Meeting:

<https://us06web.zoom.us/j/4738766982?pwd=NWVrY1NFMGExMzlpOGJRMjFjdm5VQT09>

**Time:** 2023 April 27 10:00 pm Beijing, Shanghai ([Here](#) is a tool for time zone converting)

**Meeting ID:** 473 876 6982

**Passcode:** 102938

## Faculty Work Gallery

*This month we introduced a paper - from Professor Cameron Riviere.*

*If you are interested in showcasing your research, grants, book releases, conference presentations, or any work you deem valuable and interesting to share, please feel free to contact us.*

### Cable Tension Optimization for an Epicardial Parallel Wire Robot



#### Journal of Medical Devices



#### Cable Tension Optimization for an Epicardial Parallel Wire Robot ✓

Accepted Manuscript

Aman Ladak, Roger J Hajjar, Srinivas Murali, Jeremy J. Michalek, Cameron N. Riviere

Check for updates

+ Author and Article Information

*J. Med. Devices.* 1-43

Paper No: MED-22-1114 <https://doi.org/10.1115/1.4056866>

Published Online: February 8, 2023 [Article history](#)

#### Author Information

##### Cameron Riviere

Associate Research Professor, The Robotics Institute

Associate Research Professor (by courtesy), Dept. of Biomedical Engineering

Director, Surgical Mechatronics Laboratory

Carnegie Mellon University

#### Abstract

HeartPrinter is a novel under-constrained 3-cable parallel wire robot designed for minimally invasive epicardial interventions. The robot adheres to the beating heart using vacuum suction at its anchor points, with a central injector head that operates within the triangular workspace formed by the anchors, and is actuated by cables for multi-point direct gene therapy injections. Minimizing cable tensions can reduce forces on the heart at the anchor points while supporting rapid delivery of accurate injections and minimizing procedure time, risk of damage to the robot, and strain to the heart. However, cable tensions must be sufficient to hold the injector head's position as the heart moves and to prevent excessive cable slack. We pose a linear optimization problem to minimize the sum of cable tension magnitudes for HeartPrinter while ensuring the injector head is held in static equilibrium and the tensions are constrained within a feasible range. We use Karush-Kuhn-Tucker optimality conditions to derive conditional algebraic expressions for optimal cable tensions as a function of injector head position and workspace geometry, and we identify regions of injector head positions where particular combinations of cable tensions are optimally at minimum allowable tensions. The approach can rapidly solve for the minimum set of cable tensions for any robot workspace geometry and injector head position and determine whether an injection site is attainable.

Please click [HERE](#) to find more information.

## Introducing New Faces

We're pleased to welcome 2 new faces to the GEC team - **Yihe & Penghui!**



**Yihe (Lina) He**  
[lina.he@gecacademy.com](mailto:lina.he@gecacademy.com)

### 01 Educational background:

Bachelor of Economics, University of British Columbia

### 02 What are your current duties?

I serve as Academic Manager at GEC Academy. I am mainly responsible for the management of project-based online research seminar, including direct communication with professors and connecting with GEC's product center and operation center to ensure the smooth running of the whole program

### 03 What made you choose GEC Academy?

I've been working in the education field since I graduated, and GEC has always been famous in the industry, as a leading educational company in China. One of my friends who worked in GEC introduced me to the GEC's job opportunity by coincidence. As it turns out, coming to work for GEC was the right decision!

### 04 What are your specialisms and interests?

As an employee of an educational company, I am committed to creating more and better programs for all students and giving them more opportunities to study with a teacher from prestigious universities.

### 01 Educational background:

Bachelor of Journalism and Communication, Tianjin Polytechnic University, 2016.9-2020.7

### 02 What are your current duties?

I serve as a Course Coordinator at GEC Academy. My job responsibilities involve communicating with professors effectively and I try to work toward a higher level of professionalism. I am also responsible for organizing students to attend classes and solve any problems encountered in their projects.

### 03 What made you choose GEC Academy?

I have been engaged in the education industry after graduation, which makes me very interested in background improvement. At the same time, the company's values and vision are in line with my personal understanding of the education industry.

### 04 What are your specialisms and interests?

I am a good listener and communicator since I have a patient and reliable personality. I have a great understanding and it makes the experience of communicating with me much more enjoyable for other people. And because of my academic background, I was able to interact more effectively with humanities and social science professors.

At the same time, I am also very willing to get in touch with projects of different themes, because it will be very rewarding for students and myself.



**Penghui (Kaven) Yao**  
[kaven.yao@gecacademy.com](mailto:kaven.yao@gecacademy.com)





## University Opens Institute of Chinese Classics Translation

*Shanghai University inaugurated a research institute dedicated to the English interpretation of Chinese literary classics on Sunday. Aimed at helping more people understand traditional Chinese culture, the new Institute of Bilingual Chinese Classics is led by Zhao Yanchun, a professor at the School of Foreign Languages at the university. One of the objectives of the institute is to translate a bounteous treasure of major Chinese classics in the coming years, said Zhao, who leads a team of more than 20 teachers and postgraduates in Chinese literature research at Shanghai University.*

Click [HERE](#) to read the full story!

## LATEST NEWS OF CHINA EDUCATION

### Smart Education Platform Boosts Teacher Training in China



*An online education platform, named Smart Education of China, has provided abundant and diversified training programs for Chinese teachers and helped improve their teaching level, according to a report published in People's Daily on Monday. The platform was launched amid efforts to digitalize teacher training, stated the report, citing statistics from the Ministry of Education (MOE) which showed that more than 13.7 million teachers had participated in a training program designed for the winter vacation of 2023, accounting for 74.4 percent of all the full-time teachers in the country.*

Click [HERE](#) to read the full story!

## AMAZING WORK FROM GEC STUDENTS

Each month, GEC will introduce some of our exceptional students' work in a specific research area to our audiences. This month we selected two articles from our previous students in the field of **Economics**.

### Challenge and Opportunity for Development of Start-up in Pet Economy Through E-commerce Channel

This article investigates the economic environment of the pet market in recent years, analyzes the impact of national policies, social development, and the economic environment on the electronic pet industry, focuses on the domestic and foreign development of China's electronic pet industry, and analyzes the problems existing in the electronic pet industry. Including its response measures. This paper found that the internal competitors of pet e-commerce are mainly the mass and commercialization of the existing platforms, while the supply market and the food market mostly appear.

Click [HERE](#) to read the full text!



### The Impact of COVID-19 on Perth House Price - A Machine Learning Perspective

After analyzing suburb information, school-area concentration, subway stations distribution, and 20 other parameters, a machine learning project using Catboost regression is utilized to predict house prices in Perth. To improve the prediction accuracy, a few innovative variables are created, like "Average\_area" which indicates the average floor area per bedroom. Simultaneously, several regression algorithms were selected to apply to the model, and Catboost is selected based on a newly designed evaluation method in this research. With the project, using an alternative approach of the Difference-in-Difference (DID) method allows the product to keep the control group as the pre-COVID terms to analyze the impact made by the pandemic to house price market in Perth. The results show that there is no evidence indicating the house prices have been impacted by the pandemic.

Click [HERE](#) to read the full text!



## WHAT PROGRAMS DOES GEC OFFER IN April 2023 SEMESTER?

In April, GEC launches a total of 37 online research programs in the areas of Finance, Marketing, Economics, Computer Science, Electrical Engineering, Materials Science, Quantum Physics, Applied Mathematics, and so on, partners with 15 Chinese universities to develop students' global competence through the GEC Global Competence Development Course and provides 7 personalized program for Chongqing University, Guangzhou Medical University, Hubei University of Technology, and Shenzhen University. In this Spring, GEC also set up 9 customized lectures for Nanjing University of the Arts, Chongqing University of Posts and Telecommunications, Zhejiang Chinese Medical University, and Southwestern University of Finance and Economics. We will continue to gather students, faculty, and staff for an unrivaled academic experience.

The tables  
[GEC 2023 April Program List](#),  
[Universities offering GEC Global Competence Courses in April 2023](#),  
[GEC Personalized Programs for Universities](#),  
[GEC Customized Lectures for Universities in April 2023](#)  
show detailed information about the programs that GEC launches in April.

Please click [HERE](#) to find previous program/course offerings.

### GEC Team Role Clarification

The introduced teams include the Leadership Team, the Teaching Team, the Academic Team, the Academic Branding Team, the Product Management Team, the Application Team, and the Finance Team. Their aims and responsibilities have been elaborated on in detail.

Additionally, the roles of each team have been clarified, including the president, the director, the leading instructor, the teaching fellow, the academic manager, the program coordinator, etc. The clarification centers on their responsibilities, and their names, titles, photos were also attached. Click [HERE](#) to access the recording.

Please download GEC Team Introduction [HERE](#).

### Newsletter Improvement Survey

We would love to hear your thoughts or feedback on how we can improve your experience with our newsletter.

For your convenience, please click [HERE](#) to fill out the survey link.

#### GEC Academy

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