

**2017**

**IEEE International Conference on Image Processing**

**Conference at a Glance**

Sept. 17-20, 2017

CNCC, Beijing, China

## SCHEDULE AT A GLANCE

### Sunday, Sept. 17, 2017

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09:00 – 12:00 Tutorials (T1, T2, T3)  
13:30 – 16:30 Tutorials (T4, T5, T6, T7)  
18:30 – 20:30 Welcome Reception

### Monday, Sept. 18, 2017

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08:00 - 09:00 Opening Ceremony  
09:00 - 10:00 Plenary: PLEN-1: Michael Elad  
10:00 - 10:30 Coffee Break  
10:30 - 12:30 Lecture Sessions, Special Sessions  
10:30 - 12:00 Poster Sessions, Demo Session  
12:30 - 14:00 Industry Workshop (Netflix), Lunch Time,  
14:00 - 16:00 Lecture Sessions, Special Sessions  
14:30 - 16:00 Poster Sessions  
14:00 - 18:30 Challenge Session I, Challenge Session II  
16:00 - 16:30 Coffee Break  
16:30 - 18:10 Lecture Sessions  
16:30 - 18:00 Poster Sessions

### Tuesday Sept. 19, 2017

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09:00 - 10:00 Plenary: PLEN-2: Song-Chun Zhu  
10:00 - 10:30 Coffee Break  
10:30 - 12:30 Lecture Sessions, Special Sessions, Industry Workshop (MathWorks)  
10:30 - 12:00 Poster Sessions, Doctoral Student Symposium  
12:30 - 14:00 Industry Workshop (Wolfram), Lunch Time  
14:00 - 16:00 Lecture Sessions, Special Sessions  
14:00 - 15:30 Industry Keynotes  
14:30 - 16:00 Poster Sessions  
16:00 - 16:30 Coffee Breaks  
16:30 - 18:10 Lecture Sessions, Industry Panels  
16:30 - 18:00 Poster Sessions  
18:30 - 21:30 Awards Banquet

### Wednesday, Sept. 20, 2017

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09:00 - 10:00 Plenary: PLEN-3: Kari Pulli  
10:00 - 10:30 Coffee Break  
10:30 - 12:30 Lecture Sessions, Special Sessions  
10:30 - 12:00 Poster Sessions, Challenge Session III, Challenge Session IV  
12:30 - 14:00 Industry Workshop (Google), Lunch Time  
14:00 - 16:00 Lecture Sessions, Special Sessions  
14:30 - 16:00 Poster Sessions  
16:00 - 16:30 Coffee Break  
16:30 - 18:10 Lecture Sessions  
16:30 - 18:00 Poster Sessions

## SCHEDULE AT A GLANCE

Special Sessions/Events	SRD: Image & Video Sensing, Representation & Display		TEC: Image & Video Processing Techniques		COM: Image & Video Communications		ECI: Electronic & Computational Imaging		IVA: Image & Video Analysis		IVU: Image & Video Interpretation & Understanding		IFS: Information Forensics & Security		ISA: Integrated Systems & Applications		Industry Program
<b>Mon, Sept 18</b>	306B	307A	307B	308	309A	309B	310	311A	311B	PA	PB	PC	PD	PE	PF	PG	See Room Assignments Below
08:00 – 09:00	Opening Ceremony (Hall B)																
09:00 – 10:00	Plenary: Michael Elad (Hall B)																
10:00 – 10:30	Coffee Break (North Foyer)																
10:30 – 12:30	MA-L1: Video Coding I	MA-L2: Advanced Camera Techniques	MA-L3: Contour-based Segmentation	MA-L4: Biometric Recognition I	MA-L5: 3D Shape and Pose	MA-L6: People and Action	Special Session MA-L7: Perceptual Quality Evaluation	Special Session MA-L8: Trends in Statistical Analysis of Manifold Data	MA-L9: Linear and Non-linear Filtering I	MA-PA: Sensing and Acquisition	MA-PB: Partial Differential Equation Based Processing	MA-PC: Image and Video Networking	MA-PD: Stereoscopic, Multiview, and 3D Processing I	MA-PE: Registration, Fusion, and Matching	MA-PF: Object Detection I	MA-PG: Image Classification and Applications I	Demo Session (Park View Foyer)
	Poster Sessions (10:30 – 12:00)																Industry Workshop (Netflix): Video Encoding at Scale (Rm 209AB)
12:30 – 14:00	Lunch																
14:00 – 16:00	MP-L1: Video Coding II	MP-L2: Video Quality Assessment	MP-L3: Image and Video Segmentation	MP-L4: Watermarking and Steganography	MP-L5: Classification & Recognition	MP-L6: Deep Learning for Retrieval	MP-L7: Object Detection II	Special Session MP-L8: Saliency Detection and Applications	MP-L9: Blurring and Lighting	MP-PA: Representation and Modeling I	MP-PB: Linear and Non-linear Filtering II	MP-PC: Image and Video Compression Standards	MP-PD: Stereoscopic, Multiview, and 3D Processing II	MP-PE: Motion Estimation and Analysis I	MP-PF: Object Tracking I	MP-PG: Image Classification and Applications II	Grand Challenge I: Light Field Image Coding (Rm 208AB)
	Poster Sessions (14:30 – 16:00)																Grand Challenge II: Video Compression Technology (Rm 208AB)
16:00 – 16:30	Coffee Break (North Foyer)																
16:30 – 18:10	MQ-L1: Multispectral Imaging	MQ-L2: Image Representation I	MQ-L3: Segmentation Using Deep Learning		MQ-L5: 3D Analysis	MQ-L6: Content Summarization	MQ-L7: Object Tracking II	MQ-L8: Object Detection III	MQ-L9: Color Image Processing	MQ-PA: Representation and Modeling II	MQ-PB: Multi-resolution Processing	MQ-PC: Video Coding III	MQ-PD: Computational Imaging I	MQ-PE: Shape Analysis I	MQ-PF: Deep Neural Networks	MQ-PG: Image and Video Analysis and Retrieval	Grand Challenge II: Video Compression Technology (Rm 208AB)
	Poster Sessions (16:30 – 18:00)																
<b>Tues, Sept 19</b>	306B	307A	307B	308	309A	309B	310	311A	311B	PA	PB	PC	PD	PE	PF	PG	See Room Assignments Below
09:00 – 10:00	Plenary: Song-Chun Zhu (Hall B)																
10:00 – 10:30	Coffee Break (North Foyer)																
10:30 – 12:30	TA-L1: Stereoscopic, Multiview, and 3D Processing III	TA-L2: Visual Quality Models	TA-L3: Motion Estimation and Analysis II	TA-L4: Face and Gesture Recognition and Tracking	TA-L5: Image Classification I	TA-L6: Image and Video Labeling and Retrieval I	TA-L7: Object Detection IV	Special Session TA-L8: Video Compression Technology in Open Codes	TA-L9: Image Super-resolution	TA-PA: Synthesis, Rendering, and Visualization	TA-PB: Image Denoising I	TA-PC: Video Coding IV	TA-PD: Computational Imaging II	TA-PE: Semantic and Deep Learning Segmentation	TA-PF: Color and Multispectral Imaging	Doctoral Student Symposium	Industry Workshop (MathWorks): Deep Learning with MATLAB (Rm 208AB)
	Poster Sessions (10:30 – 12:00)																Industry Workshop (Wolfram): Mathematica's Framework for Deep Neural Networks and Image Processing (Rm 209AB)
12:30 – 14:00	Lunch																
14:00 – 16:00	TP-L1: Stereoscopic, Multiview, and 3D Processing IV	TP-L2: High Dynamic Range Imaging	TP-L3: Shape Analysis II		TP-L5: Facial Recognition	TP-L6: Image and Video Retrieval	TP-L7: Object Tracking III	Special Session TP-L8: Light Field Imaging and Display	TP-L9: Enhancement and Restoration	TP-PA: Image Quality Assessment	TP-PB: Image Enhancement I	TP-PC: Image Coding I	TP-PD: Biomedical Image Processing I	TP-PE: Image and Video Segmentation II	TP-PF: Object Detection V	TP-PG: Image and Video Labeling and Retrieval II	Industry Keynotes (Rm 306)
	Poster Sessions (14:30 – 16:00)																
16:00 – 16:30	Coffee Break (North Foyer)																
16:30 – 18:10	TQ-L1: Scanned Document Processing	TQ-L2: Image Representation II	TQ-L3: Semantic Segmentation		TQ-L5: Learning for Recognition	TQ-L6: Semantic Analysis	TQ-L7: Object Detection VI	TQ-L8: Biomedical Image Processing II	TQ-L9: Image and Video Enhancement	TQ-PA: Perception and Quality Models	TP-PB: Image Enhancement II	TQ-PC: Biometric Recognition II	TQ-PD: Computational Image Formation & Reconstruction I	TQ-PE: Shape Analysis III	TQ-PF: Object Tracking IV	TQ-PG: Image Retrieval I	Industry Panel (Rm 306)
	Poster Sessions (16:30 – 18:00)																
18:30 – 22:00	Awards Banquet																
<b>Wed, Sept 20</b>	306B	307A	307B	308	309A	309B	310	311A	311B	PA	PB	PC	PD	PE	PF	PG	See Room Assignments Below
09:00 – 10:00	Plenary: Kari Pulli (Hall B)																
10:00 – 10:30	Coffee Break (North Foyer)																
10:30 – 12:30	WA-L1: 3D and Panoramic Video Coding	WA-L2: Computational Image Formation and Reconstruction I	WA-L3: Image Registration	WA-L4: Image and Video Forensics I	WA-L5: Object Detection VII	WA-L6: Video Analysis	WA-L7: Deep Learning for Image Classification	Special Session WA-L8: Computational Imaging	WA-L9: Up-sampling and Super-resolution	WA-PA: Visual Attention	WA-PB: Image Restoration I	WA-PC: Face Recognition	WA-PD: Biomedical Image Processing II	WA-PE: Image and Video Segmentation III	WA-PF: Deep Learning and Neural Networks	WA-PG: Image Retrieval II	Grand Challenge II: Image Restoration for Video Coding Improvement (Rm 302A)
	Poster Sessions (10:30 – 12:00)																Grand Challenge IV: Content-based Video Relevance Prediction (Rm 302A)
12:30 – 14:00	Lunch																
14:00 – 16:00	WP-L1: Image Coding II	WP-L2: Computational Imaging II	WP-L3: Biomedical Image Segmentation I		WP-L5: Object Recognition and Classification	WP-L6: Scene Analysis	WP-L7: Deep Learning for Image and Video Analysis	Special Session WP-L8: Visual Content Modeling & Understanding	WP-L9: Image Denoising II	WP-PA: Stereoscopic, Multiview, and 3D Coding	WP-PB: Interpolation, Super-resolution, and Mosaicing I	WP-PC: Image and Video Forensics II	WP-PD: Computational Imaging System I	WP-PE: Texture Analysis	WP-PF: Object Detection VIII	WP-PG: Saliency Estimation and Video Analysis	Industry Workshop (Google): Selected Topics on Visual Data Compression and Processing at Google (Rm 306)
	Poster Sessions (14:30 – 16:00)																
16:00 – 16:30	Coffee Break (North Foyer)																
16:30 – 18:10	WQ-L1: Image and Video Communications	WQ-L2: Sparse Representation	WQ-L3: Image Fusion		WQ-L5: Computational Imaging System II	WQ-L6: Synthesis, Representation and Rendering	WQ-L7: Object Detection IX	WQ-L8: Biomedical Image Processing IV	WQ-L9: Image Inpainting	WQ-PA: Image Restoration II	WQ-PB: Interpolation, Super-resolution, and Mosaicing II	WQ-PC: Security and Forensics Applications	WQ-PD: Hardware and Software Systems	WQ-PE: Biomedical Image Segmentation II	WQ-PF: Image Classification II	WQ-PG: Video Classification and Applications	
	Poster Sessions (16:30 – 18:00)																

## REGISTRATION AND LUNCH

ICIP2017 Registration and Reception Centre is located in the **Main Lobby on CNCC level one in the delegates accesses C1-C3**. If you have any questions about the conference, stop by the registration centre or e-mail: [icip2017@zhculture.cn](mailto:icip2017@zhculture.cn).

### Registration and Reception Centre Hours of Operation:

Saturday, September	16-----14:00-18:00
Sunday, September	17-----07:00-19:00
Monday, September	18-----07:00-18:00
Tuesday, September	19-----07:30-18:00
Wednesday, September	20-----07:30-18:00

### Meeting Lunch for Registrants

Date: Sept.17-20, 2017

Place: Ballroom A, 1F CNCC

Time: 12:00pm-13:30pm

Note: Every registrant is provided with a lunch ticket which can be used for either buffet in Ballroom A or lunchbox just outside Ballroom A

## PRESENTATION GUIDELINES

### Lecture Presentation Guidelines

Each paper is allocated 20 minutes lecture sessions, including time for questions, session chair introductions, and any set up that is not completed in advance. Be prepared to begin your presentation as soon as the prior presenter has finished; it is important to keep on schedule. You should meet with your session chair during the break immediately prior to your session. Meet inside or near the door of the presentation room. If the room is not being used, this will give you a chance to test any presentation equipment you will be using. Copying your files to the computer before the session will also save you some time during your presentation. Note: The presentation computer has ONLY a USB port. There is no CD-ROM or other disc drive.

### Poster Presentation Guidelines

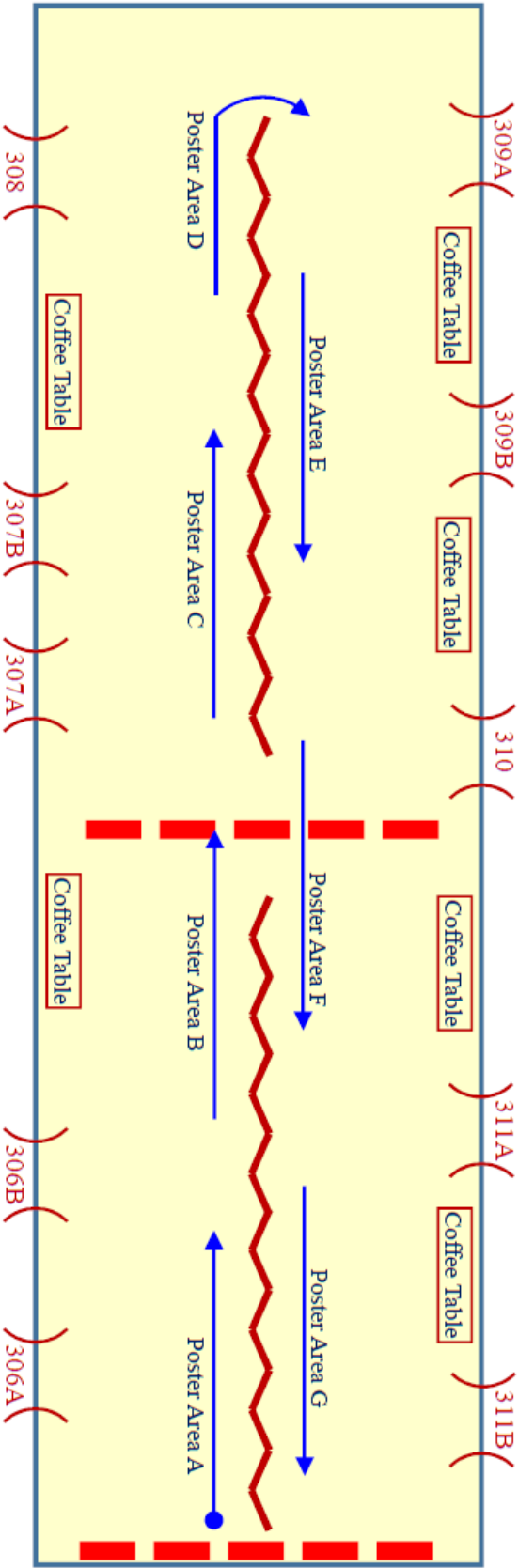
Each poster session is 90 minutes long. You must remain present for the entire duration of your poster session. Please arrive at the poster area about 15 minutes before your session begins and report to the session chairs.

All poster should remain on the boards for the entire session time. Everyone should mount his/her poster on the boards before the session begins. Please take down your poster following the session.

For each paper accepted within a poster session, a poster board space is reserved with dimensions 1m tall and 2m wide. **Poster may NOT exceed 1m height or 2m width.**

The boards will be arranged in rows. Each reserved paper space will be assigned an ID label, The ID label is also the ID label on the program booklet for your paper.

Poster Layout



## EXHIBITORS AND EXHIBITION HOURS

### Exhibition Location

All exhibitions are in the Parkview Foyer on the 3F of CNCC

### Exhibition Hours

Monday, September 18.....08:40 - 18:00

Tuesday, September 19.....08:40 - 18:00

Wednesday, September 20.....08:40 - 18:00

### Exhibitors

BoothNumber	Exhibitor
01	Mathworks
02	Speechocean
03	ZTE
04	Springer
05	Sinovoice
06	Universal Wisdom
07	Haikang
08	Oriental Cable Network
09	Skyworth
10	SPS
11	ICIP2018



Springer

Skyworth 创维

OCN  
东方有线

NGB  
Lab

看尚  
www.can.tv

speechocean  
海天瑞声

## PATRONS

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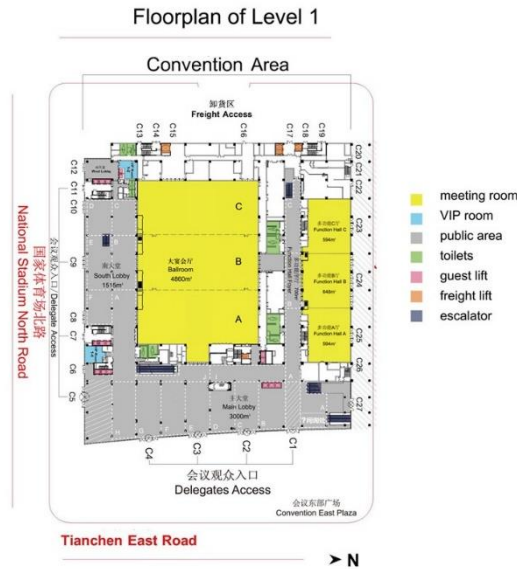




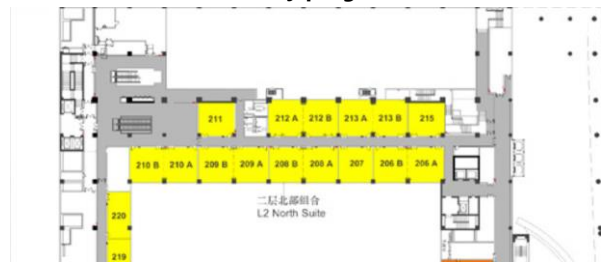
## CNCC LAYOUT

All ICIP2017 conference programs are located in CNCC Conference Area, delegates accesses are C1-C3.  
Tutorials and some industry programs are held in the rooms of north suite on the 2<sup>nd</sup> floor.  
Most of the programs, all posters and exhibitions are in the rooms of north suite on the 3<sup>rd</sup> floor.  
Opening ceremony and keynotes speeches are in plenary hall on the 4<sup>th</sup> floor.

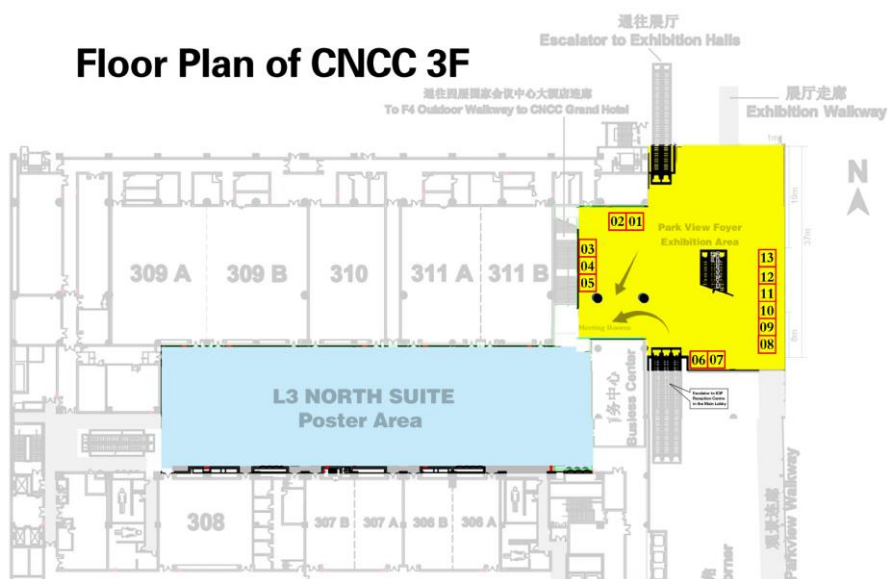
### CNCC 1st Floor: Registration and Reception Center, Lunches, Welcome Reception and Banquet



### CNCC 2nd Floor North Suite: for several industry programs and tutorials

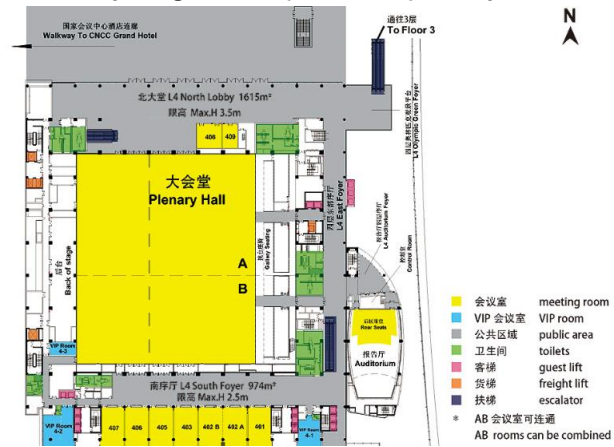


### CNCC 3rd Floor North Suite: for most of the programs, all posters and exhibitions



## CNCC LAYOUT

CNCC 4th Floor Plenary Hall: for opening ceremony and all keynote speeches



## LOCAL INFORMATION

### Conference Venue

ICIP 2017 will take place at China National Convention Center (CNCC) Conference Area, the premier conference venue in China.

### China National Convention Center (CNCC)



### Introduction

CNCC is China's largest and newest international conference center with primary location and completed facilities. It is located in the heart of the Olympic Green adjacent to the National Stadium (Bird Nest), the National Aquatics Center (Water Cube) and the National Indoor Stadium.

Sitting in the center of the Olympic commercial circle between Beijing's fourth and fifth ring roads, CNCC boasts an enviable location. It's only 30 minutes drive to the airport and the subway station is connected with CNCC's basement which enables people to quickly go to the city center, the airport, the Beijing Railway station, the central business district, China's silicon valley Zhongguancun, and many tourist attractions such as Tian'anmen Square, Forbidden City or Summer Palace. It takes only one hour from CNCC to the renowned Great Wall and Ming Tombs.

CNCC complex consists of the Convention Center, CNCC Grand Hotel, InterContinental Hotel and two office buildings. The Center itself is 398m long, 148m wide, 42m high and its has eight floors and two more in the basement with a shopping mall inside. CNCC is China's most versatile international conference venue ideal for congresses, meetings, exhibitions, banquets, product launches, corporate annual dinners, etc. CNCC's center-piece is its over 70 meeting rooms of various sizes equipped with the most advanced AV facilities.

### Language

The Official language is Mandarin and most people also use their local dialect. The standard spoken Chinese is Putonghua. English can be understood by many young people and is used in hotels and big restaurants. In all tourist hotels, staff can speak in English, Japanese or other languages. They can also write down addresses or instructions in Chinese for taxi drivers or others. In addition, roads in major cities are signposted in Pinyin, the official Romanization system of the Chinese characters, which makes it quite easy to get around with the help of a map.

### Address

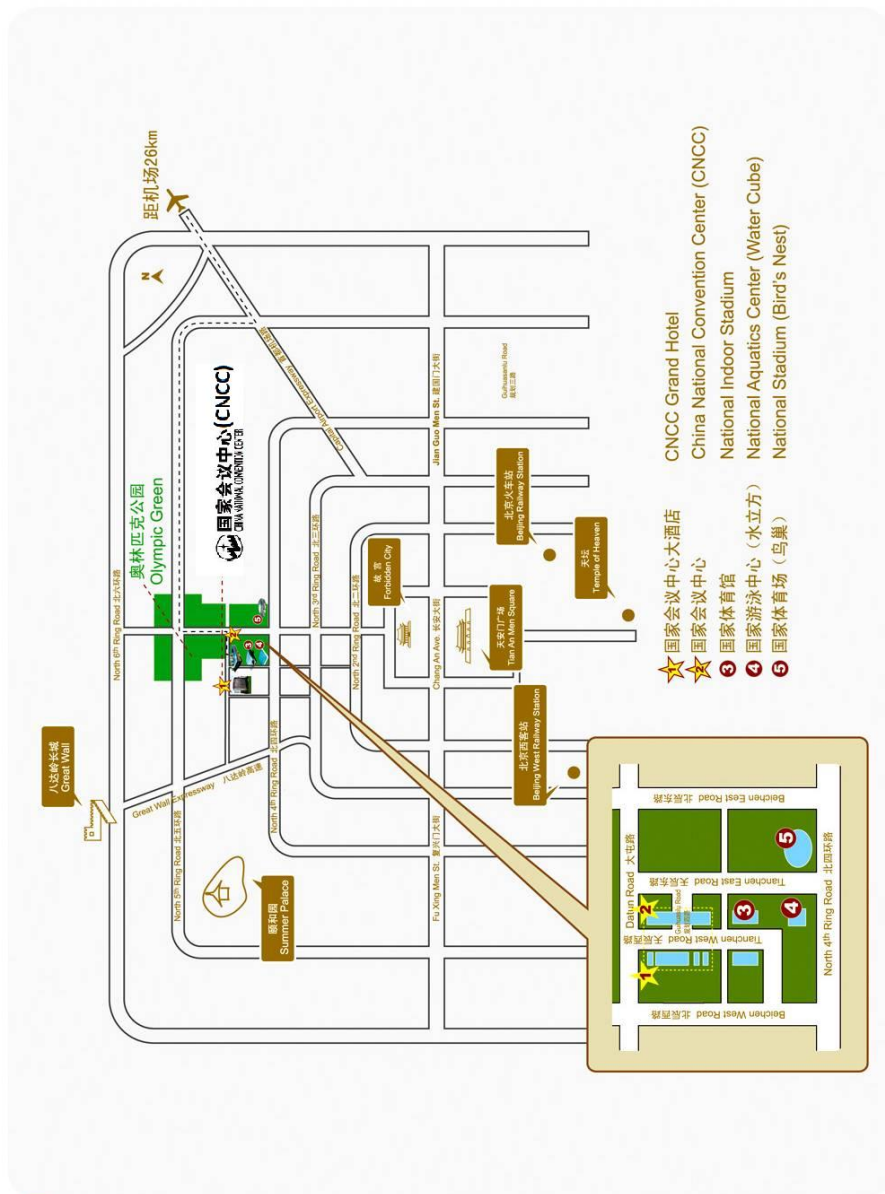
Building 1, No.8 Precincts, Beichen West Road, Chaoyang District, Beijing 100105, China

### Website

<http://www.cnccchina.com/en/Default.aspx>

## LOCAL INFORMATION

### Map



China National Convention Center  
No. 7 Tianchen East Road, Olympic  
Green, Chaoyang District, Beijing  
100105

国家会议中心  
北京市朝阳区奥林匹克公园天辰东路7号  
100105

CNCC Grand Hotel  
Building 1, No. 8 Precincts,  
Beichen West Road, Chaoyang  
District, Beijing 100105, China

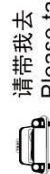
国家会议中心大酒店  
北京市朝阳区北辰西路8号院1号楼

电话/Tel. (86 10) 8437 2008  
(86 10) 8437 3300  
传真/Fax (86 10) 8437 0387  
www.cnccgrandhotel.com  
www.cnccchina.com

You can show the information to  
the taxi driver to take you to the  
hotel:

如您选择乘坐出租车，请将以下行车  
路线出示给司机：

- 1、沿首都机场高速一直到北四环，亚  
运村方向出口出
- 2、沿四环主路向西，过安慧桥后出主  
路至北四环中路辅路
- 3、沿北四环中路辅路走约1公里，在  
北辰西桥下右转至北辰西路
- 4、沿北辰西路北行至北辰路口辅路右  
转既是国家会议中心大酒店大堂



请带我去  
Please take me to:

国家会议中心  
CNCC

国家会议中心大酒店  
CNCC Grand Hotel

## LOCAL INFORMATION

### Transportation to CNCC

From Beijing Capital International Airport 26km

By taxi: estimated 80 RMB, 40 minutes.

By subway: estimated 27 RMB, 1 hour, take airport express to Sanyuanqiao station, then transfer to subway line 10 to Beitucheng station and then take line 8 to Olympic Green station, exit from E (sw) and walk about 200m to the venue.

From Beijing South Railway Station which mainly serves hi-speed trains 23km

By taxi: estimated 70 RMB, 50 minutes.

By subway: 2 RMB, 1 hour, take line 4 to Xuanwumen Station, then transfer to line 2 to Guloudajie Station, take line 8 to Olympic Green station, exit from E (sw) and walk about 200m to the venue.

From the CNCC grand hotel and the InterContinental Beijing Beichen 150m

The two hotels are very close (2 minutes by walk) to CNCC, and there are short walkways to the meeting venue.

The following mini cards might be useful when encountering problems with taxi drivers in language exchanges.

您好，  
请送我去国家会议中心，谢谢！  
北京市朝阳区天辰东路 7 号，邮编：100105

Hi, Sir/Madam,  
please take me to the [China National Convention Center \(CNCC\)](#) Thank you.  
Address: No.7 Tianchen East Road, Chaoyang District, Beijing 100105 China  
Tel: +86 10 8437 3300

### Currency Information

Renminbi (RMB) is the only currency used in China. RMB is also called Chinese Yuan. The unit of Renminbi is yuan and with smaller denominations called jiao and fen. The conversion among the three is: 1 yuan = 10 jiao = 100 fen. Paper notes are issued in denominations of 1, 2, 5, 10, 50 and 100 yuan; 1, 2 and 5 jiao; and 1, 2 and 5 fen. Coins are issued in denominations of 1 yuan; 5 jiao; and 1, 2 and 5 fen.

Money exchanges by cash or traveler's cheques can be made at the branches of Bank of China, hotels and tourist stores. Please remember to keep the receipt to exchange back to foreign currency when leaving China.

### Credit Cards

Visa, MasterCard and American Express are most commonly used in China. Cards can be used in most middle to top-range hotels, Friendship and department stores, but they cannot be used to finance your transportation costs.

### Time

GMT + 8 hours (the whole of China is set to Beijing time)

### Electricity

Electricity is 220 Volts, 50 AC; plugs can be three-pronged flat pins, three-pronged round, two flat pins or two narrow round pins. Some examples are as follows:





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## Facts & Figures

Schools	20
Departments	57
Faculty	3414

Total Student Number	47201
Undergraduates	15570
Masters Students	19311
Ph.D. Candidates	12320
International Students	3472

## Reputation & Rankings

1<sup>st</sup> US News and World Report 2017  
Global University for Engineering

3<sup>rd</sup> QS Graduate Employability  
Ranking 2017

25<sup>th</sup> QS World University Rankings  
2017- 2018

14<sup>th</sup> Times Higher Education World  
Reputation Rankings 2017

35<sup>th</sup> Times Higher Education World  
University Rankings 2017

Tsinghua was elected as Presidency of Asian Universities Alliance in 2017

AU Asian  
Universities  
Alliance



# AICloud

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