

Track 8 Results

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THIRTEENTH INTERNATIONAL CONFERENCE ON

**INDOOR POSITIONING
AND INDOOR NAVIGATION**

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NUREMBERG

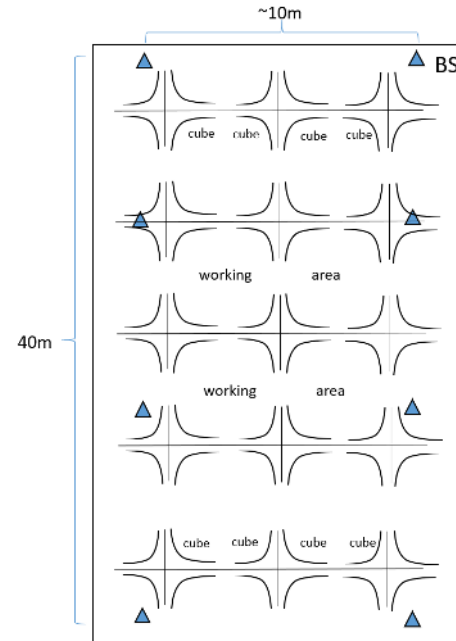




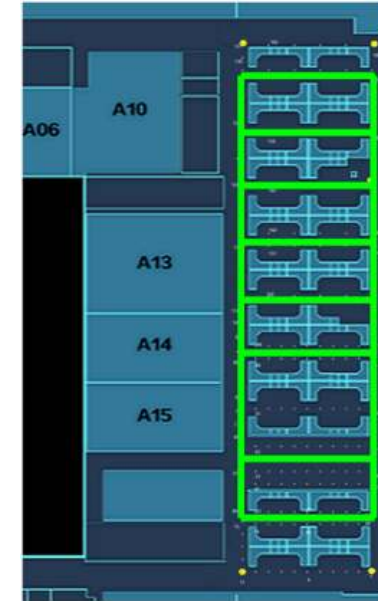
Environments



Office Picture



Testing Area Layout



Testing Routes



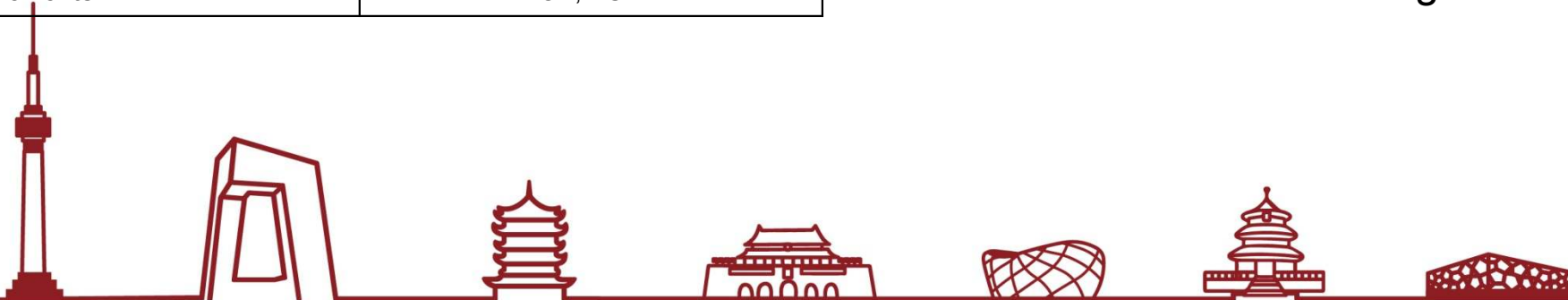


System Setup

Layout	Testing area 40 meters long, 12 meters
Carrier frequency	4.88 GHz
Bandwidth	100 MHz
Subcarrier spacing	30 kHz
gNB antenna number	1
UE antenna number	1
gNB antenna height	3 m
UE antenna height	1.5 m
Link direction	Uplink, UE sends SRS
gNB number	8
Measurements	TOA, RSRP

Practical Challenges:

1. Synchronization error between gNBs, unknown value less than 100ns.
2. Measurements are contaminated by dense indoor multipaths, i.e., measurement error
3. Limited number of ground truth labels, testing dataset only 10% are labeled with ground truth



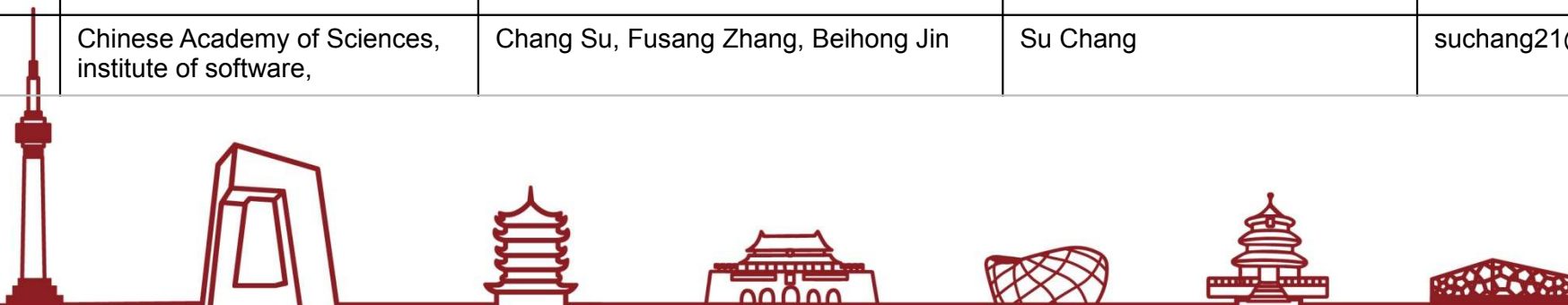


Results



Accuracy (cm@75%)	D1	D3	D4	D7	Final results (Best result in two scoring data set)
Team Name : GoD (Winner)	150.63cm	98.61cm	113.01cm	144.68cm	124.62cm
	Average score : 124.62cm		Average score : 128.85cm		
Team Name : ISCAS	411.12cm	286.69cm	233.98cm	318.14cm	276.06cm
	Average score : 348.91cm		Average score : 276.06cm		

Team Name	Department	Team members	Contact	Email
GoD	Beijing University of Posts and Telecommunications	Kai Luo, Ziyao Ma, Yanbiao Gao, Jizhou Wang, Deming Zhu, Yuqi Huo, Tianbao Pan	Jizhou Wang	wangjizhou1028@163.com
ISCAS	Chinese Academy of Sciences, institute of software,	Chang Su, Fusang Zhang, Beihong Jin	Su Chang	suchang21@otcaix.iscas.ac.cn





Congratulations!!!

