IPIN 2022

TWELFTH INTERNATIONAL CONFERENCE ON

INDOOR POSITIONING AND INDOOR NAVIGATION

Track 2 Camera

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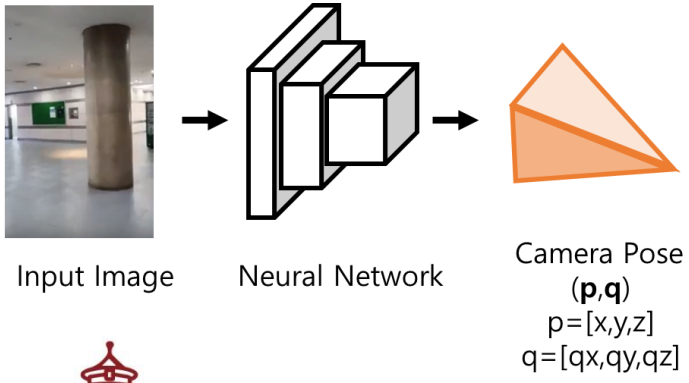
ETRI Electronics and Telecommunications Research Institute

AIR Aerospace Information Research Institute, Chinese Academy of Sciences

IPIN2022 Competition Track 2

- Track 2 is a competition designed to test state-of-the-art image-based positioning for pedestrian. Among the various technical approaches, this track focuses on the visual re-localization, which mainly estimates the exact position and orientation of query image by combining geometry methods and deep learning methods.



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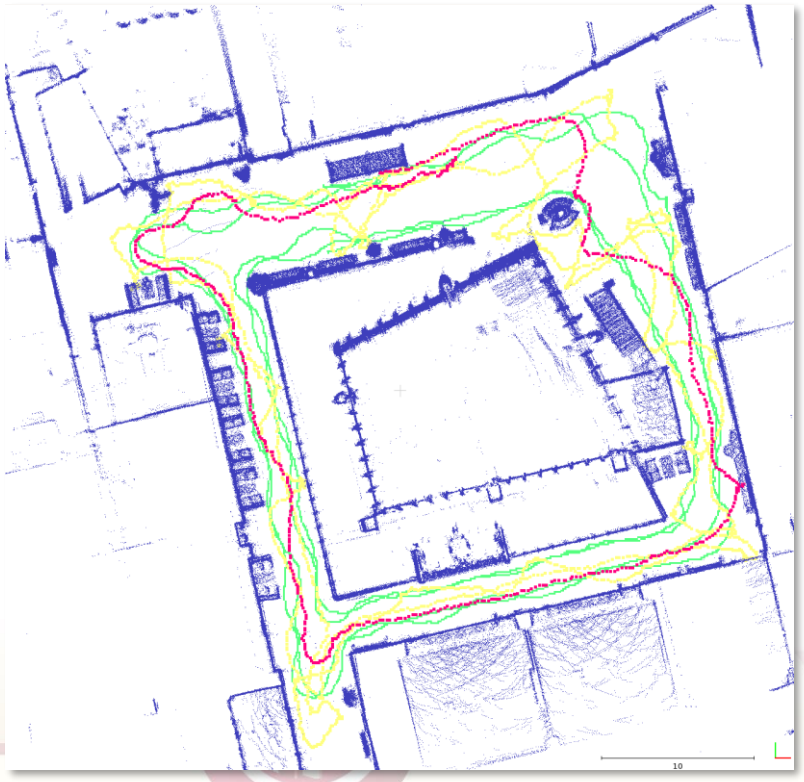
Practice (Site A)

Competition (Site B, F1)

Competition (Site B, F2)



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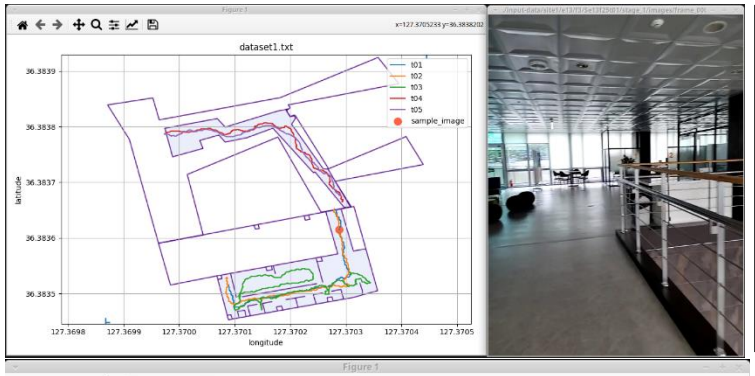
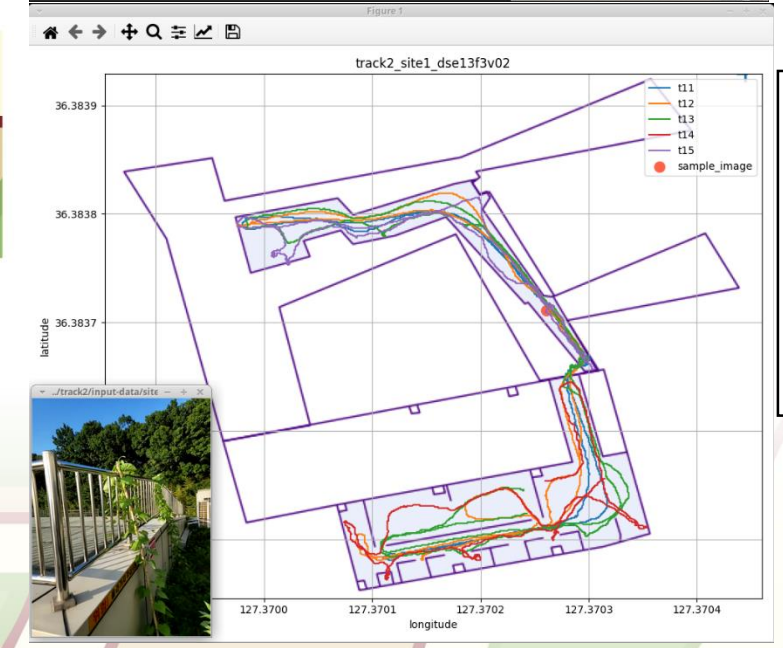
Practice (Site A)



Training data



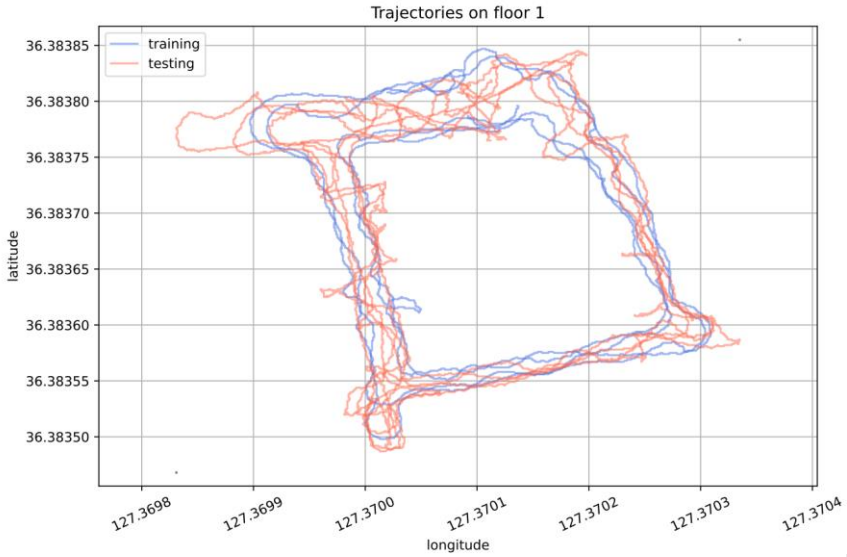
Testing trials

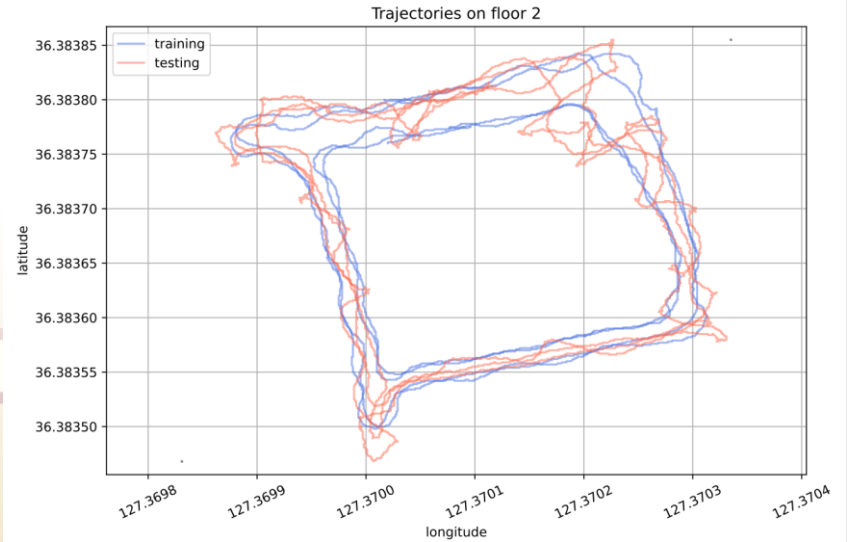
images: 640x480x3

dataset	images	size
Site A training	14192	4.4G
Site A testing	2930	1.1G
Site B training	43524	9.6G
Site B testing	5244	2.1G

scoring trials	length	images	reference points
trial1	170m	735	80
trial2	136m	750	64

Competition (Site B)





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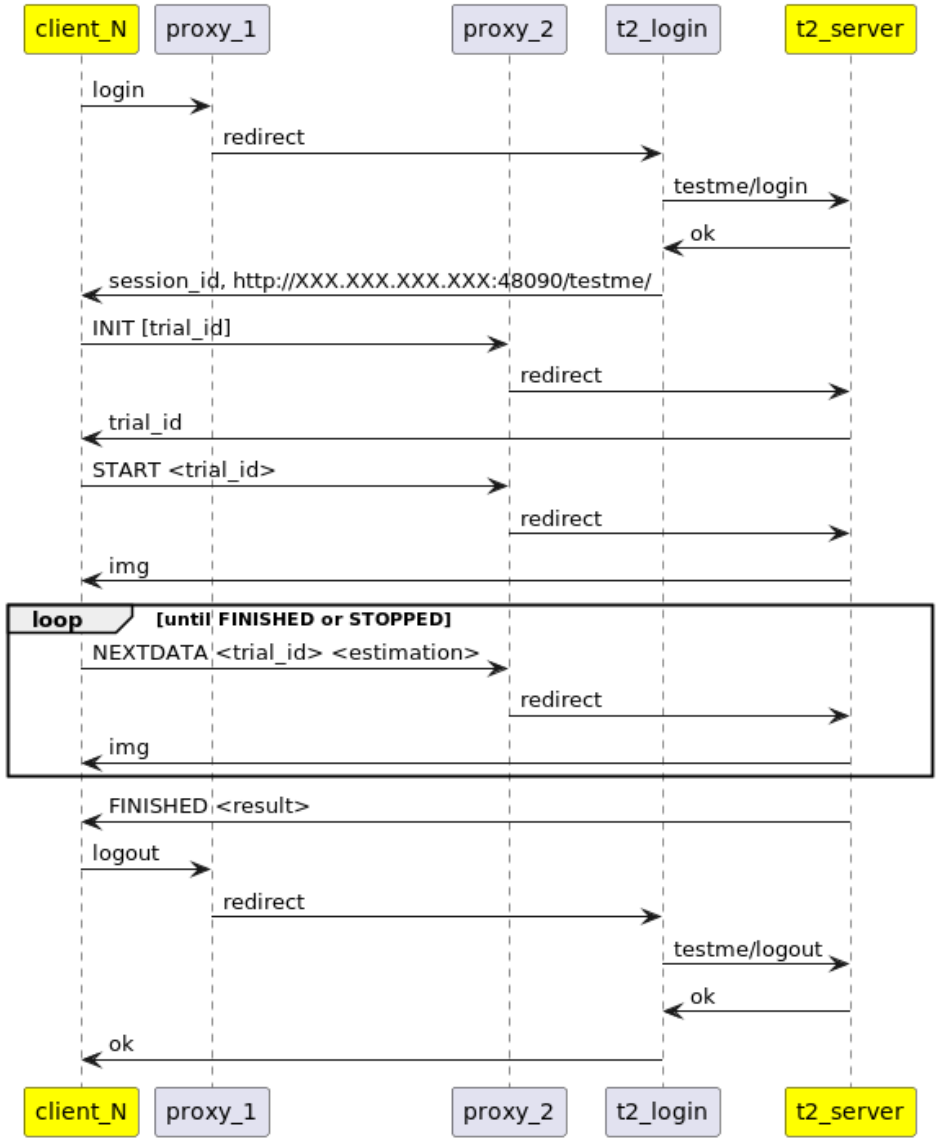
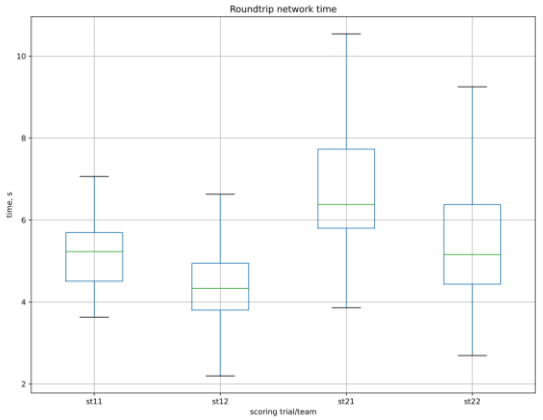
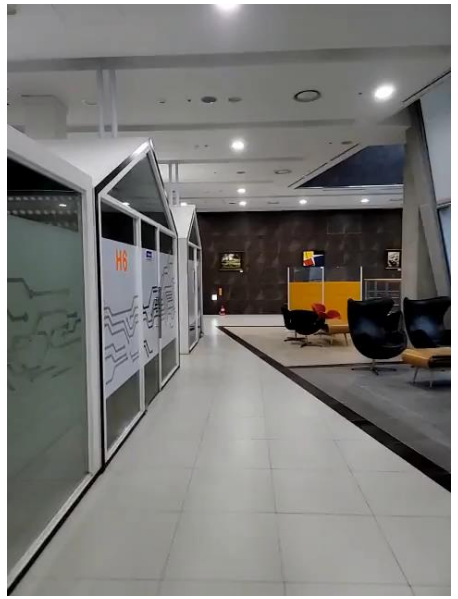
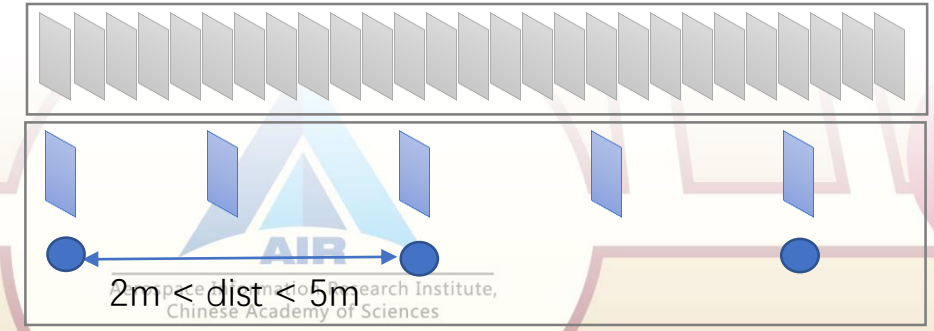




training data



scoring trials



30fps training data images

3fps scoring trial images

scoring trial reference points

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Two teams participated:

SZUSCRI

Shenzhen University
Smart City Research Institute

CamLoc

Beijing University of
Posts and Telecommunications
Chinese Academy of Sciences

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Track 2 Results

Error Values(m)	Team
2.1	CamLoc
3.2	SZUSCRI

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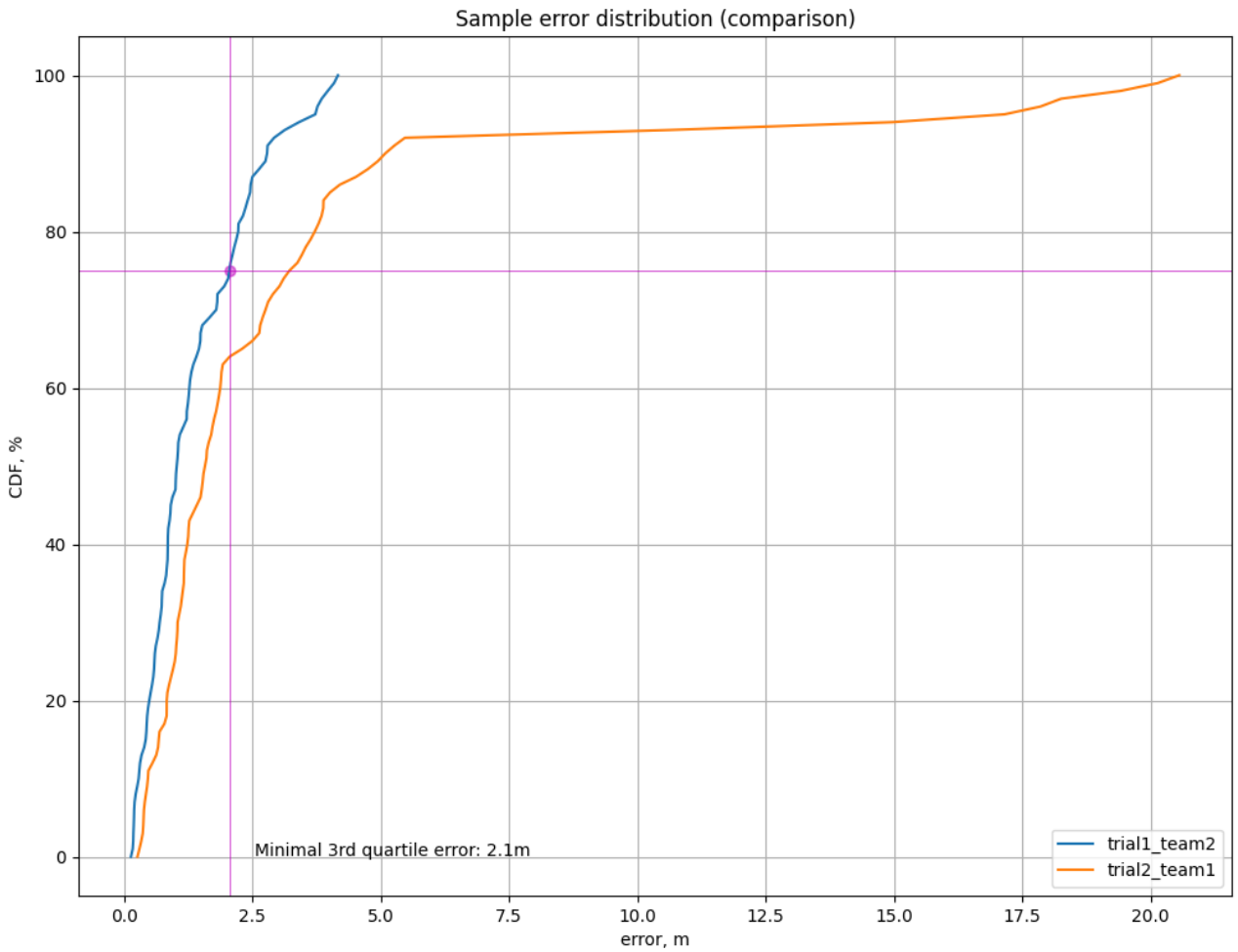
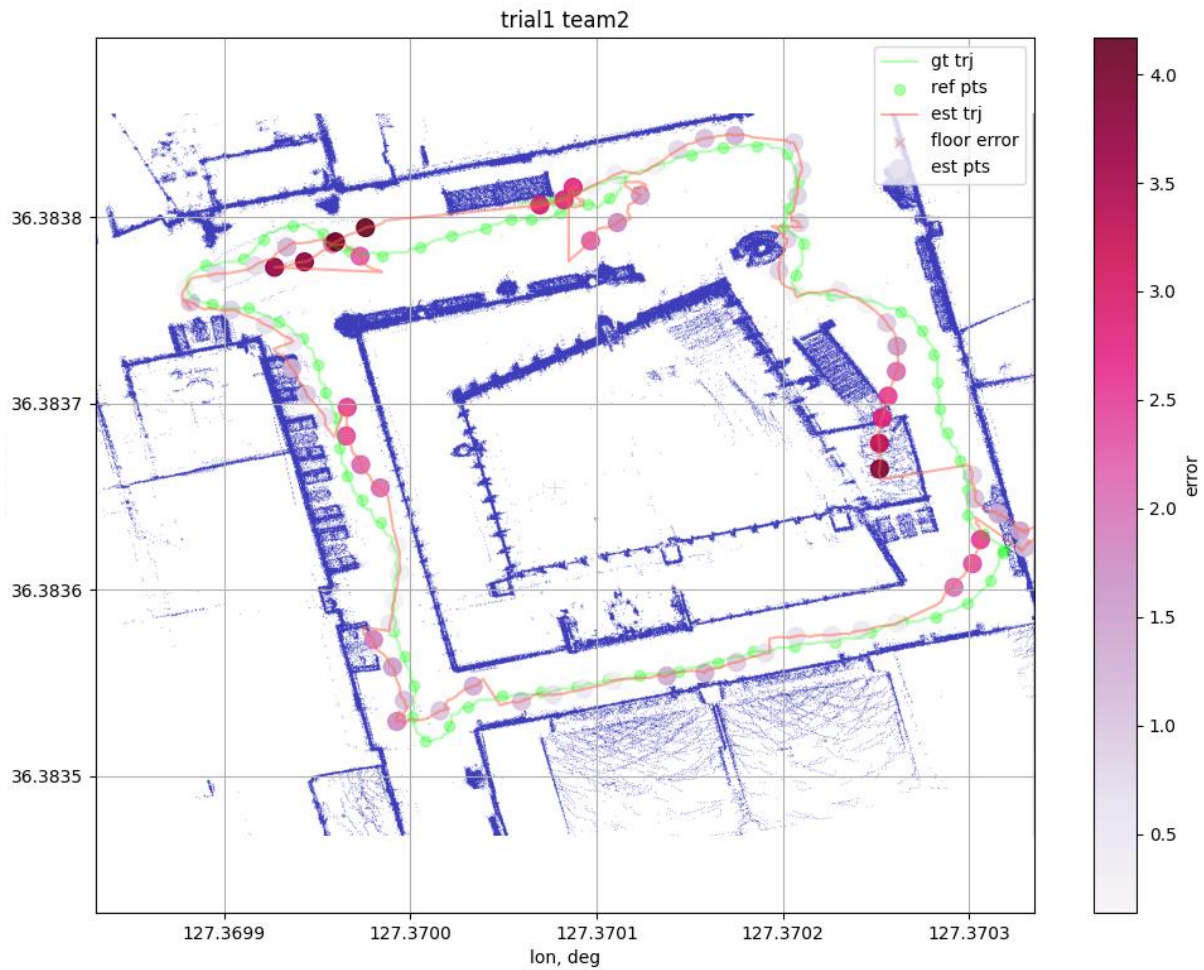
Track 2 Results





Track 2 Camera

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CONGRATULATIONS

CamLoc

Yushi Chen; Yue Zhuge; Long Wang;
Runze Chen; Haiyong Luo; Fang Zhao

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谢谢观赏