IPIN competition 2016 - Track 1

Sponsored by

KICS
The Korean Institute of Communications and Information Sciences

Track 1
Smartphone based
Chairs: Filippo Palumbo
Antonino Crivello

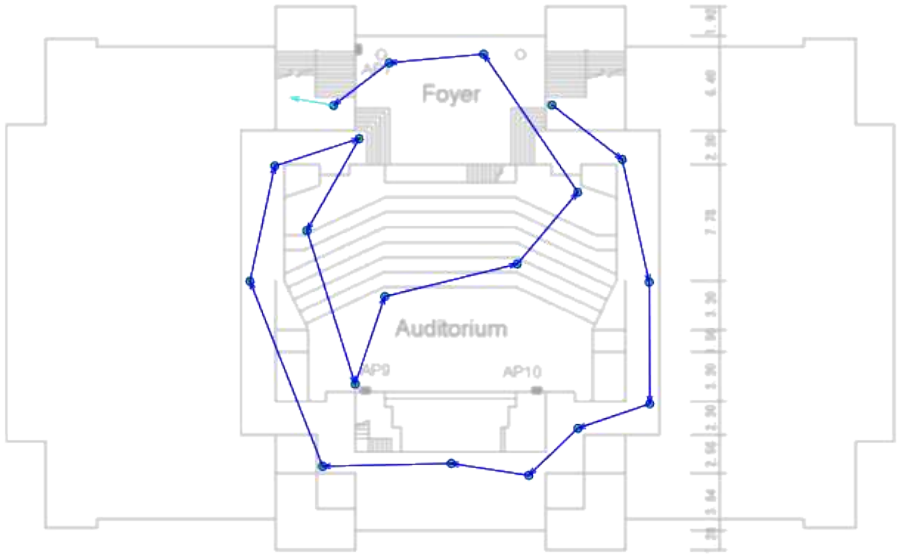
International Conference on Indoor Positioning and Indoor Navigation

EvAAL framework

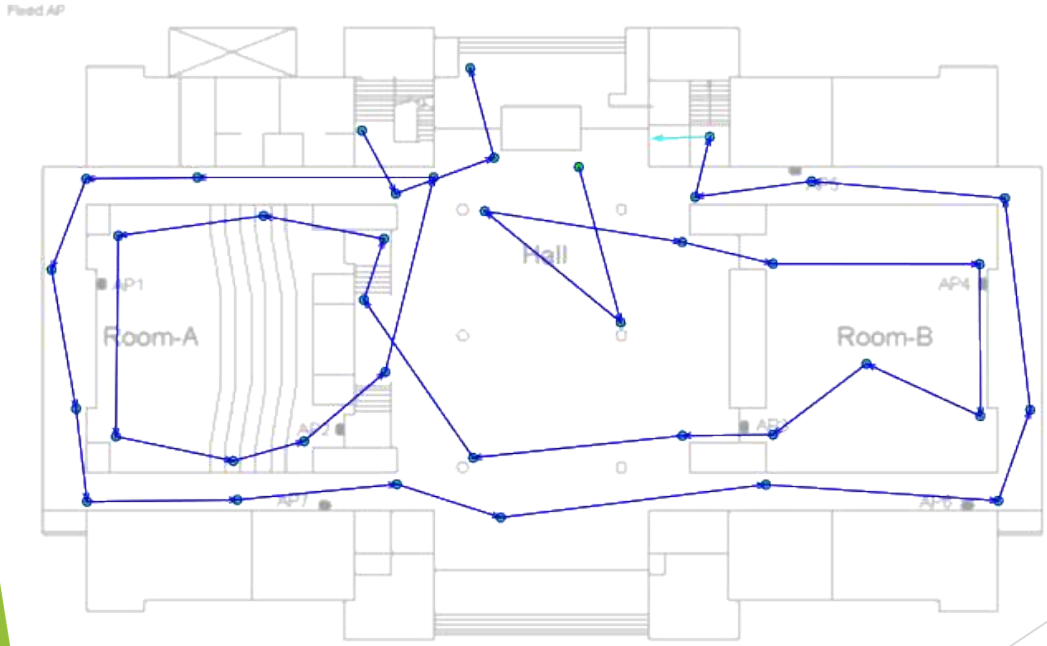
Format of Smartphone Track

- Goal: assess and measure the ability of competing systems to accurately identify their position inside a **large, public indoor area**
- The accuracy score is the **third quartile** of the localisation errors
- A penalty is added for each floor error
- The path is the same for each test competitor, takes approximately the same time and passes through all the keypoints in the same order
  - Pauses, loops, natural strides

Path of on-site Tracks 1 & 2



First Floor



Ground Floor start

Path characteristics of Smartphone Track

- 58 Keypoints
- 2000 m^2 indoor
- 2 floors
- 300+130+20 = 450 m length
- 10' ± 1' duration
- 2 long (1'), 4 short (10") pauses
- 1 upstair, 1 downstair

Smartphone Track results

Team	Origin	3° quartile of error
SNU-NESL	Seoul (KR)	8.8 m
MCL	Yeungnam (KR)	16.8 m
XMU	Xiamen (CN)	> 25 m
HaLo	Hallym (KR)	> 25 m