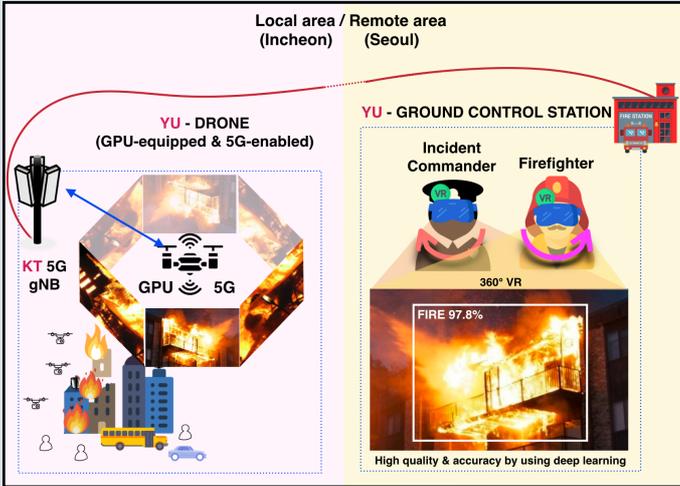


PriMO-5G: Real time AI with 5G-enabled Drone

Urban Firefighting Scenario

5G / Drone / Virtual Reality / Machine Learning



VR 360 video from the Drone

Captured by drone #1 in Yonsei University Songdo Campus



5G-enabled Drones

#1 DJI M100 + NVIDIA Jetson TX2 + Galaxy S10 5G



#2 DJI M600 + NVIDIA Jetson Xavier + Galaxy S10 5G + VR 360 camera

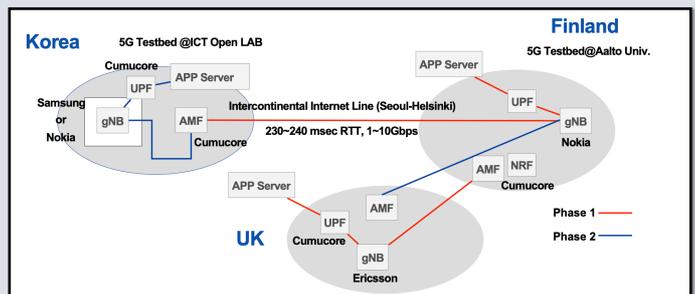


VR 360 Video & Object Detection

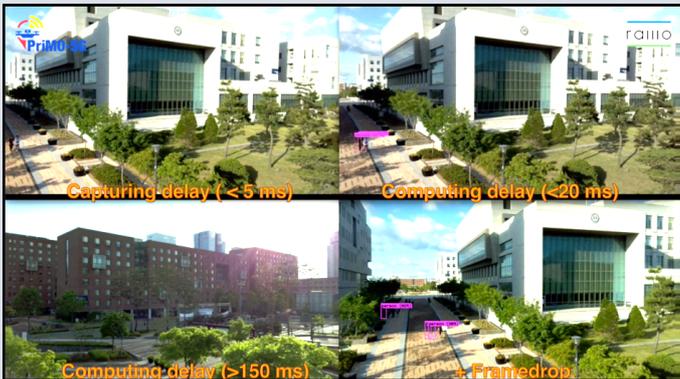


5G Cross-Continental Testbed

Test-bed Integration & Connection between KOREA and EUROPE



Object Detection (-based on AI)



Initial testbed showing aerial computation-communication trade-off. Image on the top right is processed on an MEC server, while the images in the bottom are processed on drone. Even with accelerated computing, on drone processing suffers from tremendous delay or frame drop.

