Three-dimensional communication integrated base station

Can a single base station improve 3D IIoT realism?
While three-dimensional (3D) environments offer extra challenges to enhanced accuracy and realism, research in this area remains limited. To bridge this gap, we propose a novel localization technique assisted by a single base station (BS) in 3D IIoT scenarios.

Can a single base station be used in 3D IIoT?
To bridge this gap,we propose a novel localization techniqueassisted by a single base station (BS) in 3D IIoT scenarios. Our approach employs the MUltiple SIgnal Classification (MUSIC) algorithm to jointly estimate the angle of arrival (AoA) in azimuth and elevation,as well as the time of arrival (ToA).

Can unmanned aerial vehicles be a base station for IoT?
Recently,unmanned aerial vehicles (UAVs) have been reported a lot as aerial base stations(BSs) to assist wireless communication in Internet of Things (IoT). However,most results for UAV deployment require uniform access requirements and obstacle-free environment.

How accurate is single base station sensing?
Most of the existing research focuses on single base station (BS) sensing. However, single-BS sensing is constrained by accuracy, particularly for targets at the edge of the sensing range.

Integrated Sensing and Communication (ISAC) is an important trend for future commutation networks. The Communication Base Station (CBS) can be used as a Ground ...

Recently, unmanned aerial vehicles (UAVs) have been reported a lot as aerial base stations (BSs) to assist wireless communication in Internet of Things (IoT). However, most ...

Request PDF | On Mar 1, 2017, Xiaodong Chang and others published Three-dimensional positioning of wireless communication base station | Find, read and cite all the research you ...

Integrated sensing and communication (ISAC) in the Industrial Internet of Things (IIoT) presents unique challenges in terms of ...

This paper studies the sensing base station (SBS) that has great potential to improve the safety of vehicles and pedestrians on roads. SBS can detect the targets on the ...

Abstract Integrated sensing and communication (ISAC) exhibits notable potential for sensing the unmanned aerial vehicles (UAVs), facilitating real-time monitoring of UAVs for ...

Integrated Sensing and Communication (ISAC) is an important trend for future commutation networks. The Communication ...

Driven by the intelligent applications of sixth-generation (6G) mobile communication systems

such as smart city and au-tonomous driving, which connect the ...

Channel theory is a fundamental theory of wireless communications. The sixth generation (6G) and beyond 6G (B6G) wireless communication networks are expected to ...

Integrated sensing and communication (ISAC) in the Industrial Internet of Things (IIoT) presents unique challenges in terms of localization techniques. While three-dimensional ...

This paper addresses the three-dimensional deployment problem of UAV aerial base stations equipped with edge servers in emergency rescue scenarios. A UAV deployment and ...

Driven by the intelligent applications of sixthgeneration (6G) mobile communication systems such as smart city and autonomous driving, which connect the physical and cyber ...

Web: https://www.elektrykgliwice.com.pl