Setup of an 802.11ax High-Efficiency WLAN Simulation Framework

Introduction

The latest WiFi standard 802.11ax High-Efficiency WLAN (HEW), also known as Wi-Fi 6, promises increased spectral efficiency over their predecessors especially by introducing Orthogonal Frequency Division Multiple Access (OFDMA). The support of OFDMA will enable a variety of new Internet-of-Things (IoT) applications demanding for low-cost, low-complexity modem implementations.

Source: mightygadget.co.uk

Short Project Description

The goal of this project is to setup a MATLAB-based simulation platform for the 802.11ax HEW communication standard using MATLAB's WLAN toolbox. The environment is used to analyze the performance of the new standard with respect to sensitivity for IoT use cases.

Prerequisites

- Interest in wireless communication and signal processing

What you will learn

You will gain hands-on experience with MATLAB and insights in one of the most important wireless communication schemes of our.

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