3. Orthogonal Frequency-Division Multiplexing (OFDM)
README.md

Orthogonal Frequency-Division Multiplexing (OFDM) Simulation

Description
This Python script simulates an OFDM system, which is a digital multi-carrier modulation scheme used widely in broadband communications systems like LTE and Wi-Fi.

Installation
Dependencies:
- Python 3.x
- NumPy
- Matplotlib

Install necessary packages with:

pip install numpy matplotlib

Usage
To execute the simulation:

python ofdm_simulation.py

The script outputs a plot of the OFDM signal in the time domain.

Authors
- [Your Name]

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4. Modulation and Demodulation by CDMA Using Walsh Bases
README.md

CDMA Modulation and Demodulation Using Walsh Codes

Description
This program simulates the process of CDMA modulation and demodulation using Walsh codes, showcasing how multiple signals can coexist over the same channel without interference.

Installation
Requirements:
- Python
- NumPy
- Matplotlib

Command to install dependencies:

pip install numpy matplotlib

Usage
Run the simulation using:

python cdma_walsh.py

The output includes plots showing the combined signals on different channels.

Authors
- [Your Name]

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