**ECE 430**

**Laura and Joshua**

**LAB 6**

Text

Description automatically generated

**Figure 1:** Ping test on Tx

Graphical user interface, table

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**Figure 2:** iperf showing communication between Tx and Rx

A picture containing text

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**Figure 3:** iperf showing that packets are received out of order

Graphical user interface, application, Excel

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**Figure 4:** drgui showing error at packet 60

Graphical user interface, application

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**Figure 5:** drgui showing retransmission of packet 60

Looking at our drgui logs (fig. 4 & 5), we can deduce that it takes approx. 2 seconds for a packet to be retransmitted

|  |  |
| --- | --- |
| **ARQ window size** | **Throughput (Kbits/sec)** |
| 1024 (default) | 204 |
| 1 | 24.4 |
| 512 | 209 |

**Table 1:** Experimenting withARQ window size (modulation: qam64)

Graphical user interface, application

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Figure 6: Default AMC without configuration file

Graphical user interface, text, application, table

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Figure 7: QPSK Modulation

Chart, scatter chart

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Figure 8: EVM distribution (when receiving without EVM configuration for AMC)

Text

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Figure 9: iperf without EVM configuration for AMC

Chart, scatter chart

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Figure 10: EVM distribution (when receiving with EVM configuration for AMC)

Text

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Figure 11: iperf with EVM configuration for AMC

Chart

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Figure 12: Changing Modulation Schemes (when using EVM configured AMC)