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**CSM 117 UCLA**

**DIS: 1D**

**LAB 1**

**Data Transmission over Wireless LAN: 802.11b**

**Abstract:**

Our main goal for this lab was to investigate data transmission over 802.11b Wireless LAN using different transport protocols and in the presence of noise sources. We gained the knowledge of various factors affecting data throughput in a wireless channel and the effect of sporadic losses on TCP throughput. To accomplish this we measure the UDP and TCP data throughput using Iperf measurement tool at different locations in Boelter Hall.

**Lab Results (RDS)**

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| **Goals and Results** | | |
| **#** | **Goals** | **Results** |
| **1** | Our main goal is to measure the data throughput of the protocols TCP and UDP using Iperf measurement tool at different locations in Boelter Hall. With the increasing distance and with/without microwave turned on, we noted down the overall signal to noise ratio and then measuring the data throughput. | * From the graph, it can be seen that increasing the distance will decrease the Signal Strength and Signal to Noise Ratio. * But both UDP and TCP Throughput increases with increases Signal to Noise Ratio. * With the microwave power level (off, warm, deforest, medium, medium high, and high) increases, throughput also seems increases. |