# UNIVARIATE ANALYSIS

	Bearer Id	Start ms	End ms	Dur. (ms)	IMSI	MSISDN/Number	IMEI	Avg RTT DL (ms)	Avg RTT UL (ms)	Avg Bearer TP DL (kbps)	...	Youtube DL (Bytes)	Youtube UL (Bytes)	Netflix DL (Bytes)	Netflix UL (Bytes)	Gaming DL (Bytes)	Gaming UL (Bytes)	Other DL (Bytes)	Other UL (Bytes)	Total UL (Bytes)	Total DL (Bytes)
count	1.500010e+05	150001.000000	150001.000000	1.500010e+05	1.500010e+05	1.500010e+05	1.500010e+05	150001.000000	150001.000000	150001.000000	...	1.500010e+05	1.500010e+05	1.500010e+05	1.500010e+05	1.500010e+05	1.500010e+05	1.500010e+05	1.500010e+05	1.500010e+05	1.500010e+05
mean	1.013887e+19	499.188200	498.800880	1.046086e+05	2.082017e+14	4.188282e+10	4.847454e+13	109.795706	17.662883	13300.045927	...	1.163407e+07	1.100941e+07	1.162685e+07	1.100175e+07	4.220447e+08	8.288398e+06	4.211005e+08	8.264799e+06	4.112121e+07	4.546434e+08
std	2.883597e+18	288.610872	288.096693	8.103735e+04	2.145201e+10	2.438731e+12	2.237359e+13	559.342620	76.529933	23971.798635	...	6.710569e+06	6.345423e+06	6.725218e+06	6.359490e+06	2.439675e+08	4.782700e+06	2.432050e+08	4.769004e+06	1.127635e+07	2.441421e+08
min	6.917540e+18	0.000000	0.000000	7.142000e+03	2.040470e+14	3.360100e+10	4.400150e+11	0.000000	0.000000	0.000000	...	5.300000e+01	1.050000e+02	4.200000e+01	3.500000e+01	2.516000e+03	5.900000e+01	3.290000e+03	1.480000e+02	2.866892e+06	7.114041e+06
25%	7.349880e+18	250.000000	251.000000	5.744200e+04	2.082010e+14	3.365151e+10	3.546260e+13	35.000000	3.000000	43.000000	...	5.833501e+06	5.517965e+06	5.777156e+06	5.475981e+06	2.104733e+08	4.128476e+06	2.101869e+08	4.145943e+06	3.322203e+07	2.431072e+08
50%	7.349880e+18	499.000000	500.000000	8.639900e+04	2.082020e+14	3.366380e+10	3.572240e+13	54.000000	7.000000	63.000000	...	1.161602e+07	1.101345e+07	1.164222e+07	1.099638e+07	4.234081e+08	8.291208e+06	4.218030e+08	8.267071e+06	4.114324e+07	4.558409e+08
75%	1.304240e+19	749.000000	750.000000	1.324300e+05	2.082020e+14	3.368473e+10	8.611970e+13	109.795706	17.662883	19710.000000	...	1.744852e+07	1.651556e+07	1.747048e+07	1.650727e+07	6.331742e+08	1.243162e+07	6.316918e+08	1.238415e+07	4.903424e+07	6.657051e+08
max	1.318650e+19	999.000000	999.000000	1.859336e+06	2.140740e+14	8.823970e+14	9.900120e+13	96923.000000	7120.000000	378160.000000	...	2.325910e+07									

2.201196e+07   2.325919e+07   2.201196e+07   8.434419e+08   1.655879e+07   8.434425e+08
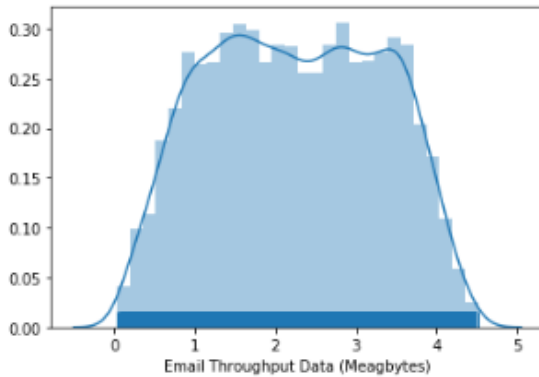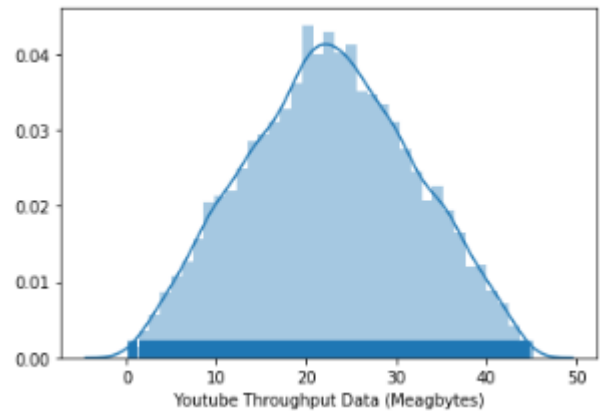1.655882e+07   7.833131e+07   9.029696e+08
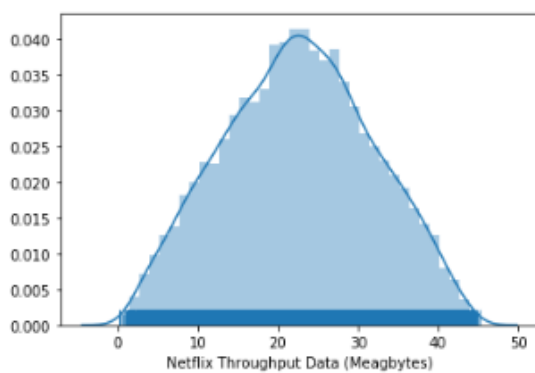
Social Media:
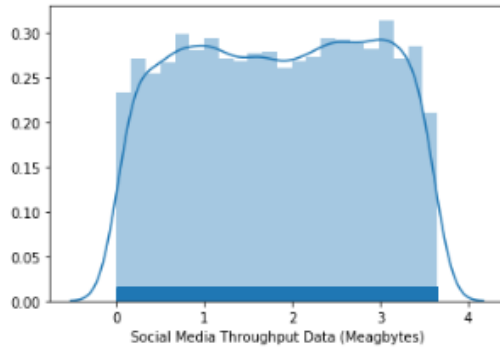
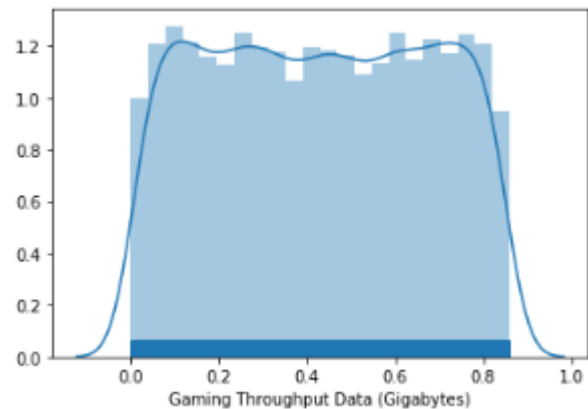Google Throughput:
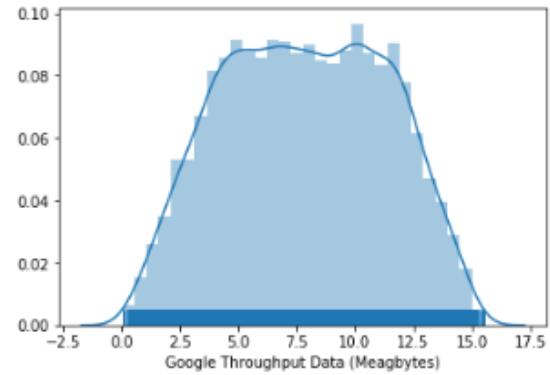
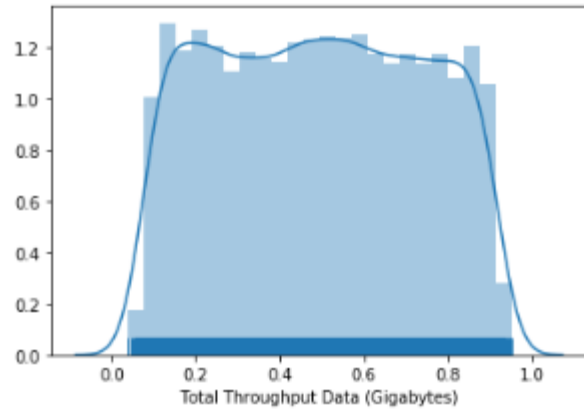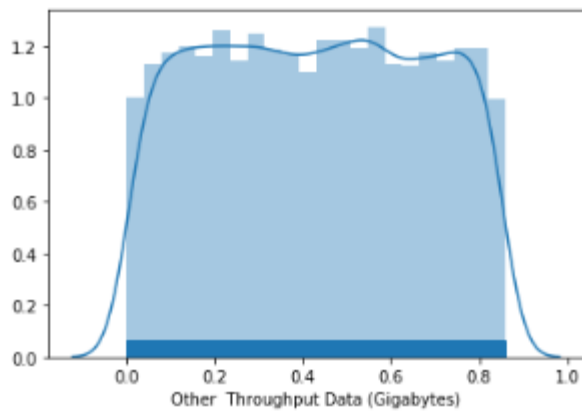Email Throughput:

Youtube Throughput:

Netflix Throughput:

Gaming Throughput:

Other Throughput:

Total Throughput:

|	Social Media DL (Bytes)	Social Media UL (Bytes)	Google DL (Bytes)	Google UL (Bytes)	Email DL (Bytes)	Email UL (Bytes)	Youtube DL (Bytes)	Youtube UL (Bytes)	Netflix DL (Bytes)	Netflix UL (Bytes)	Gaming DL (Bytes)	Gaming UL (Bytes)	Other DL (Bytes)	Other UL (Bytes)	Total UL (Bytes)	Total DL (Bytes)
count	1.500010e+05	150001.000000	1.500010e+05	1.500010e+05	1.500010e+05	150001.000000	1.500010e+05	1.500010e+05	1.500010e+05	1.500010e+05	1.500010e+05	1.500010e+05	1.500010e+05	1.500010e+05	1.500010e+05	1.500010e+05
mean	1.795322e+06	32928.434380	5.750753e+06	2.056542e+06	1.791729e+06	467373.441940	1.163407e+07	1.100941e+07	1.162685e+07	1.100175e+07	4.220447e+08	8.288398e+06	4.211005e+08	8.264799e+06	4.112121e+07	4.546434e+08
std	1.035482e+06	19006.178256	3.309097e+06	1.189917e+06	1.035840e+06	269969.307031	6.710569e+06	6.345423e+06	6.725218e+06	6.359490e+06	2.439675e+08	4.782700e+06	2.432050e+08	4.769004e+06	1.127635e+07	2.441421e+08
min	1.200000e+01	0.000000	2.070000e+02	3.000000e+00	1.400000e+01	2.000000	5.300000e+01	1.050000e+02	4.200000e+01	3.500000e+01	2.516000e+03	5.900000e+01	3.290000e+03	1.480000e+02	2.866892e+06	7.114041e+06
25%	8.991480e+05	16448.000000	2.882393e+06	1.024279e+06	8.927930e+05	233383.000000	5.833501e+06	5.517965e+06	5.777156e+06	5.475981e+06	2.104733e+08	4.128476e+06	2.101869e+08	4.145943e+06	3.322203e+07	2.431072e+08
50%	1.794369e+06	32920.000000	5.765829e+06	2.054573e+06	1.793505e+06	466250.000000	1.161602e+07	1.101345e+07	1.164222e+07	1.099638e+07	4.234081e+08	8.291208e+06	4.218030e+08	8.267071e+06	4.114324e+07	4.558409e+08
75%	2.694938e+06	49334.000000	8.623552e+06	3.088454e+06	2.689327e+06	700440.000000	1.744852e+07	1.651556e+07	1.747048e+07	1.650727e+07	6.331742e+08	1.243162e+07	6.316918e+08	1.238415e+07	4.903424e+07	6.657051e+08

max   3.586064e+06 65870.000000 1.146283e+07 4.121357e+06 3.586146e+06 936418.000000
       2.325910e+07 2.201196e+07 2.325919e+07 2.201196e+07 8.434419e+08 1.655879e+07
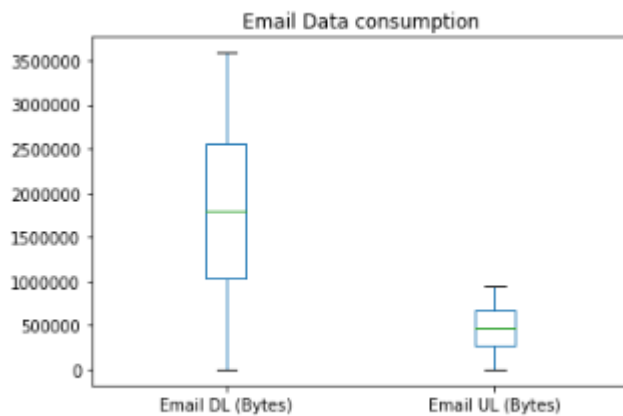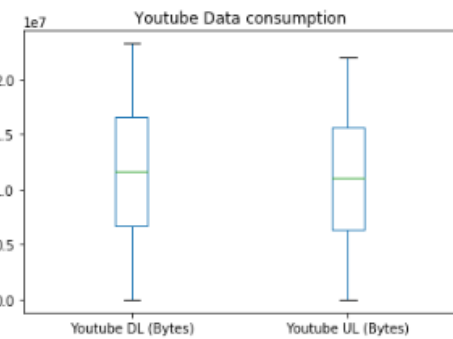   8.434425e+08 1.655882e+07 7.833131e+07 9.029696e+08
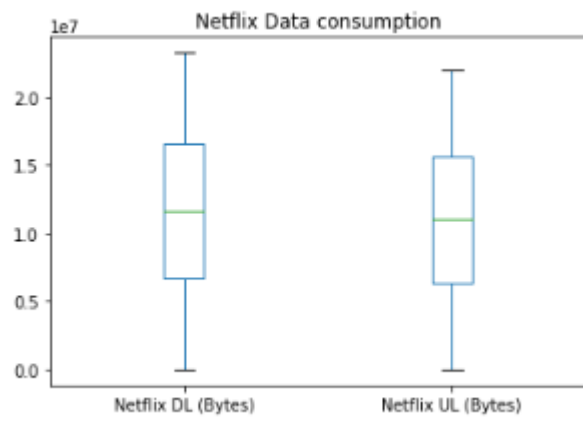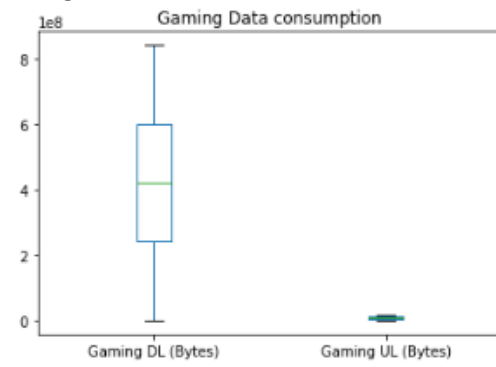
Data Consumption:

Social Media:
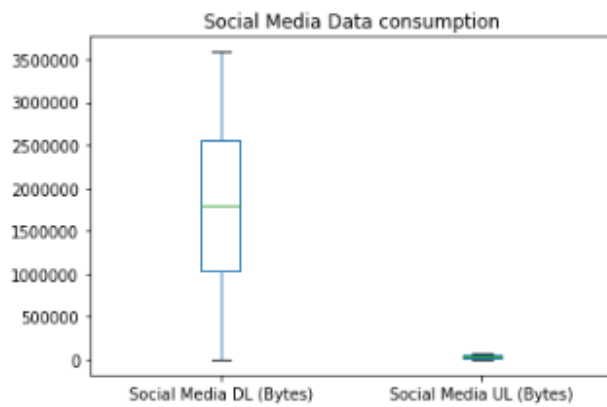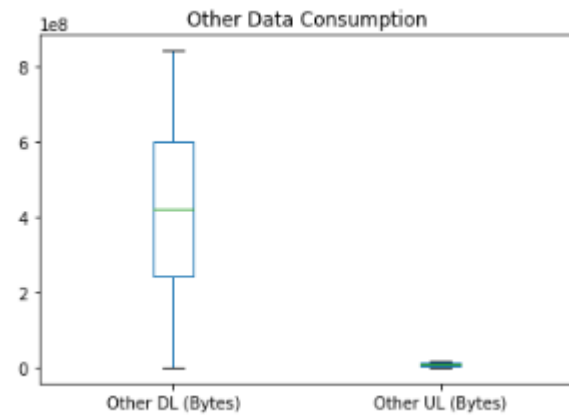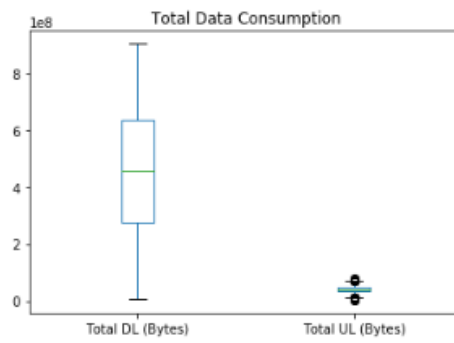

Google:
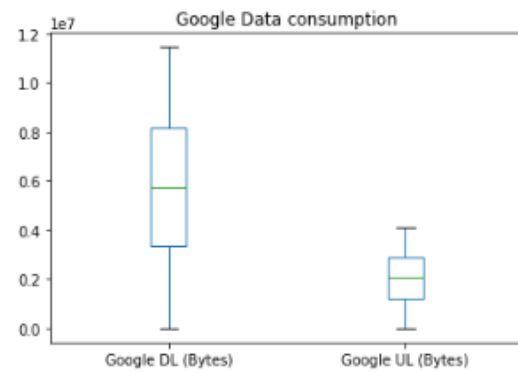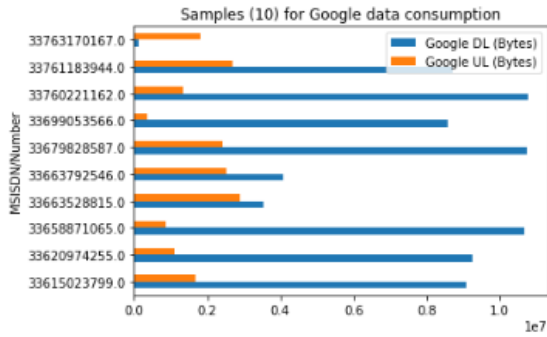

Email:

Youtube:

Netflix:
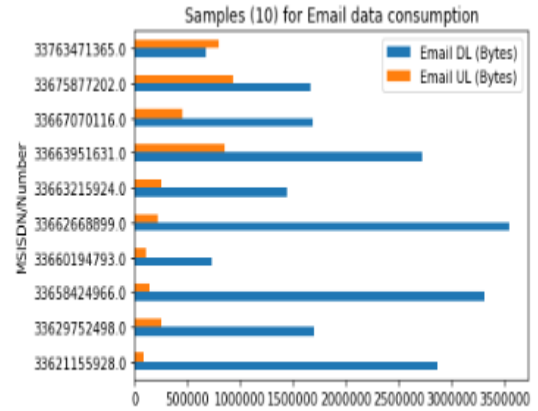

Gaming:

Others:

Total:

BIVARIATE ANALYSIS

Top Ten (10) Data Consumption:
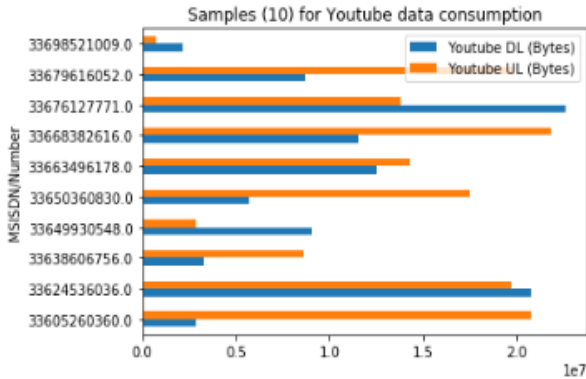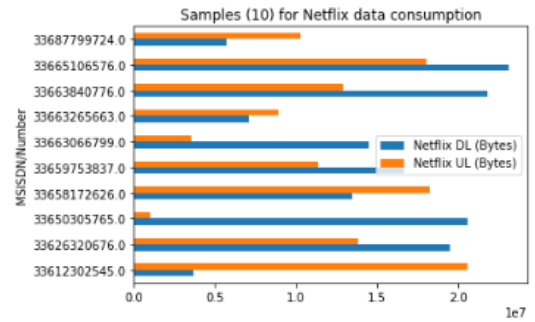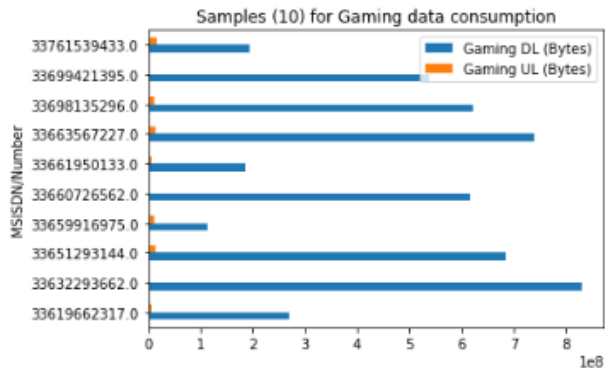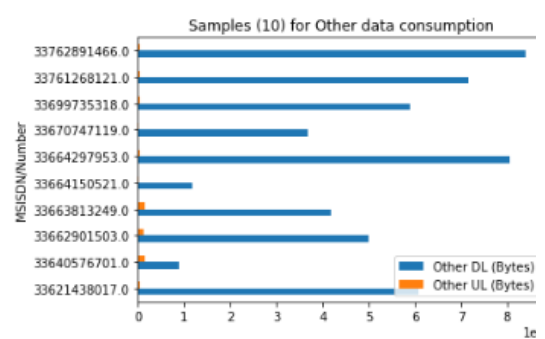
Google:

Email:

Youtube:

Netflix:

Gaming:

Others:

Total:

Samples (10) for Total data consumption
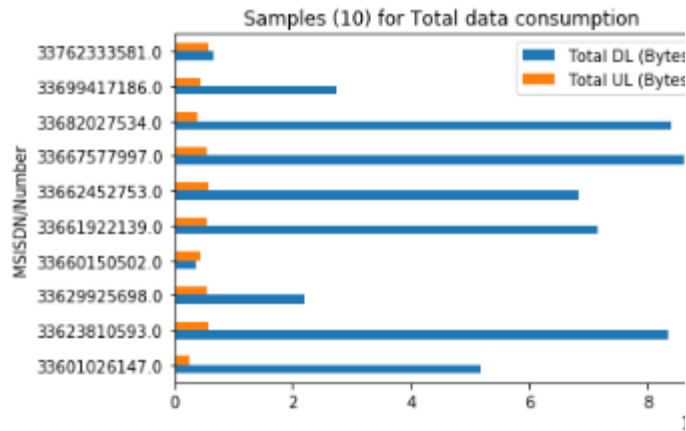
Top ten (10) Transmission Control Protocol Downlink Values in the Dataset:

	TCP DL Retrans. Vol (Bytes)	Count
0	1330.0	433
1	2660.0	219
2	38.0	200
3	92.0	192
4	1318.0	156
5	543.0	133
6	3990.0	114
7	76.0	108
8	5320.0	102
9	1288.0	93

Top ten (10) Transmission Control Protocol Uplink Values in the Dataset:

	TCP UL Retrans. Vol (Bytes)	Count
0	1330.0	1910
1	2660.0	937
2	1294.0	651
3	3990.0	548
4	1318.0	545
5	5320.0	366
6	6650.0	271
7	2636.0	234
8	7980.0	219
9	35.0	160

TCP Average:

The average TCP Retransmision on Downlink is 20809914.27034193

The average TCP Retransmision on Uplink is 759658.6648110661

The average TCP Retransmission is 10784786.467576498

RTT Average:

The average RTT Retransmision on Downlink is 109.79570605376027

The average RTT Retransmision on Uplink is 17.662882910900326

The average RTT Retransmission is 63.729294482330296

Average Throughput:

The average throughput on Downlink is 454643430.0789667

The average throughput on Uplink is 41121206.292106666

The average Throughput is 247882318.18553668