# Analyzing US Residential Mortgage Closing Disclosure Data: Identifying Error Trends and Financial Impact"

Sample Data dummy

| Person	Origination Fee	Underwriting Fee	Appraisal Fee	Credit Report Fee	Total Fees	Corrected Fees	Percentage Change	Errors	Risk Score	Difference	Correction Type
Person 1	1453.55	976.84	1010.68	202.61	3643.68	7075.76	94.23%	7	0.70	3432.08	Excessive
Person 2	1979.39	948.47	811.88	1275.62	5015.35	2784.96	-44.49%	4	0.59	-2230.39	Excessive
Person 3	1676.70	1340.70	611.88	223.42	3852.70	5936.69	54.06%	2	0.04	2083.99	Excessive
Person 4	1947.15	1110.67	574.16	192.49	3824.47	4682.55	22.44%	1	0.63	858.08	Excessive
Person 5	1683.37	1252.96	935.30	227.64	4099.27	7458.18	81.97%	5	0.84	3358.91	Excessive
Person 6	1132.09	759.21	666.58	394.19	2952.07	3961.87	34.25%	8	0.45	1009.80	Excessive
Person 7	2836.67	1421.97	582.11	198.47	5039.22	4532.98	-10.05%	0	0.06	-506.24	Excessive
Person 8	2881.70	903.89	537.53	529.68	4852.80	4716.00	-2.82%	3	0.36	-136.80	Minor
Person 9	1146.04	788.75	1042.04	207.51	3184.34	5351.58	68.03%	6	0.20	2167.24	Excessive

Total Fees vs Corrected Fees
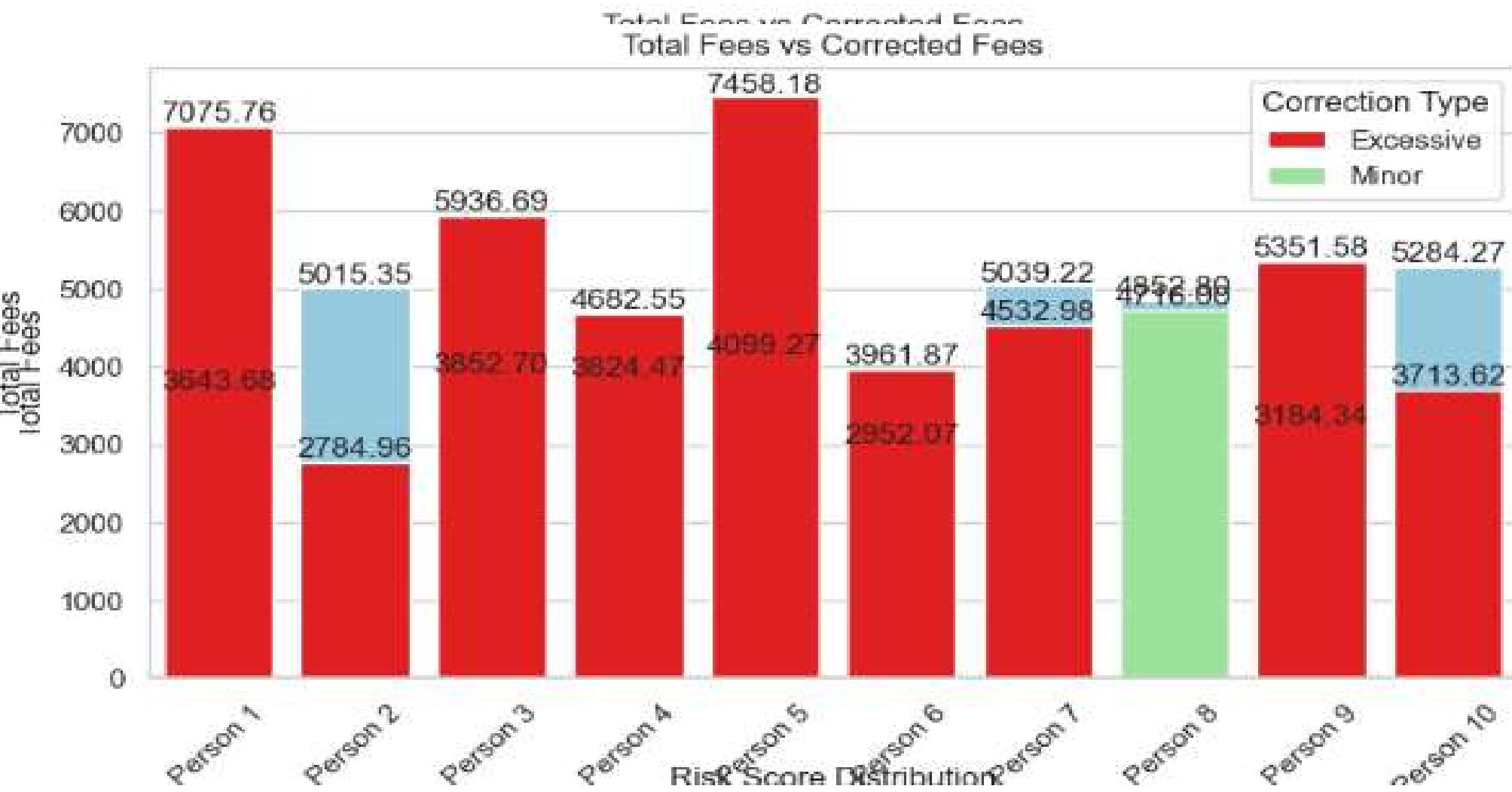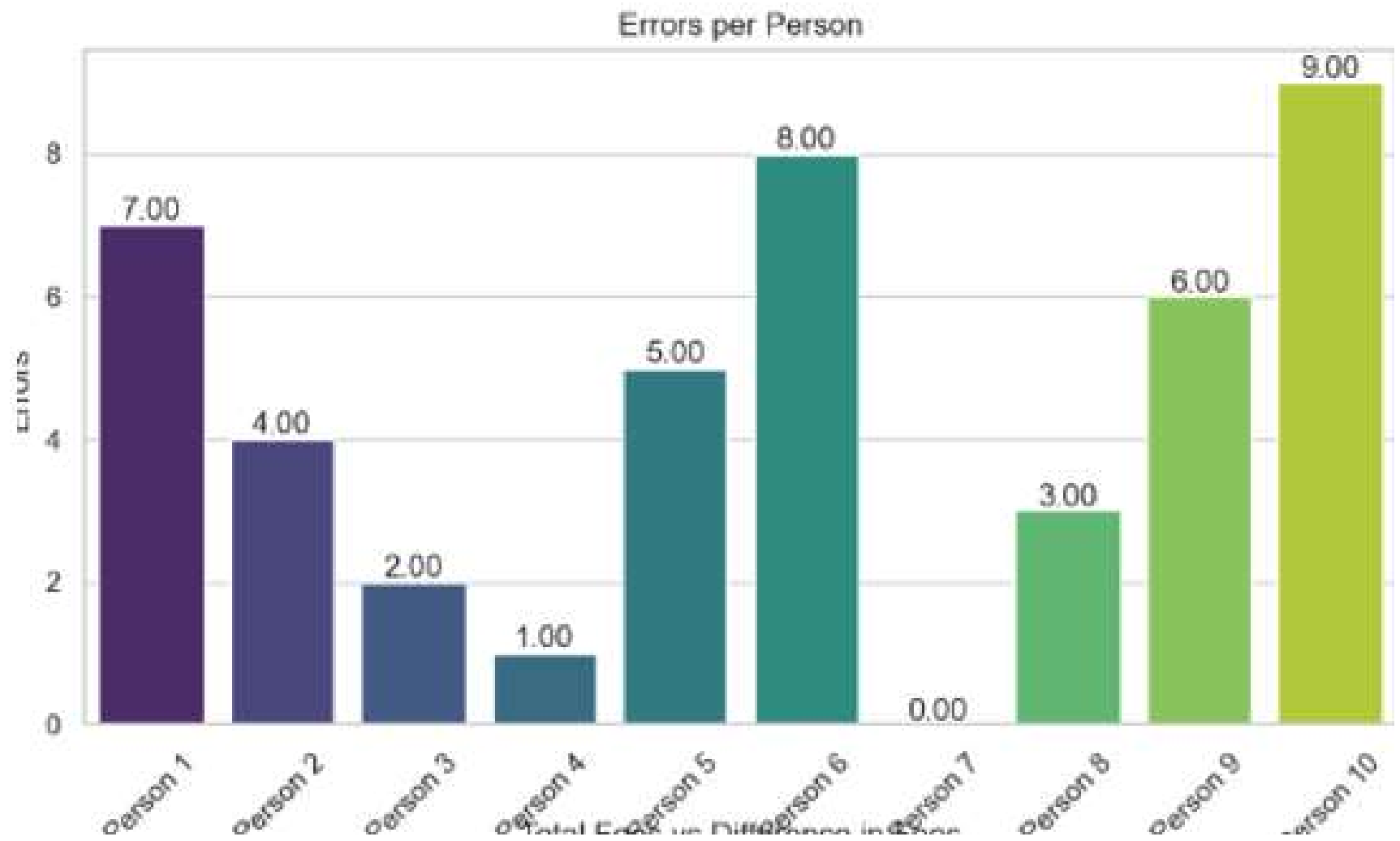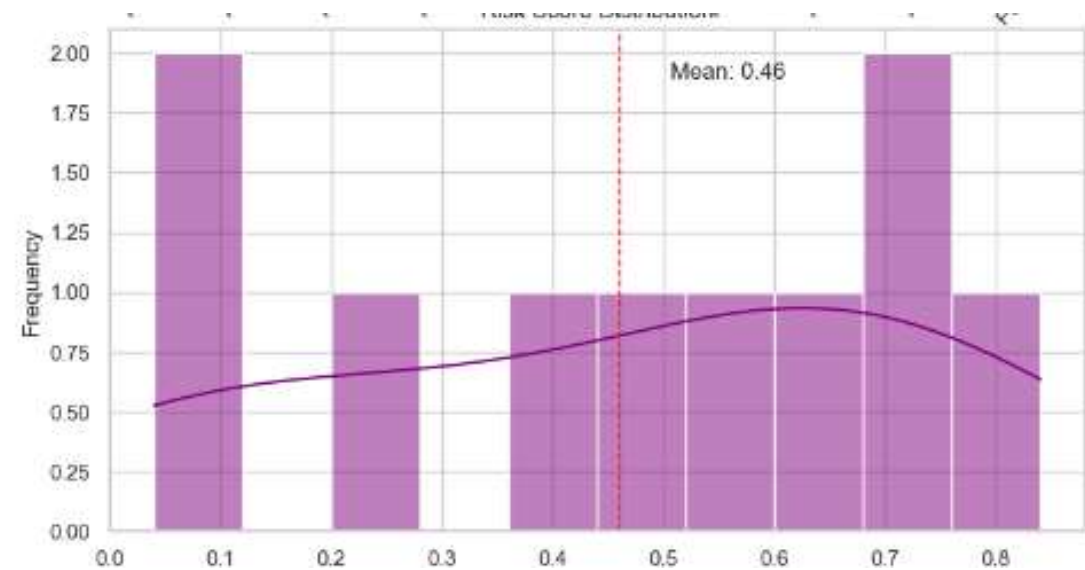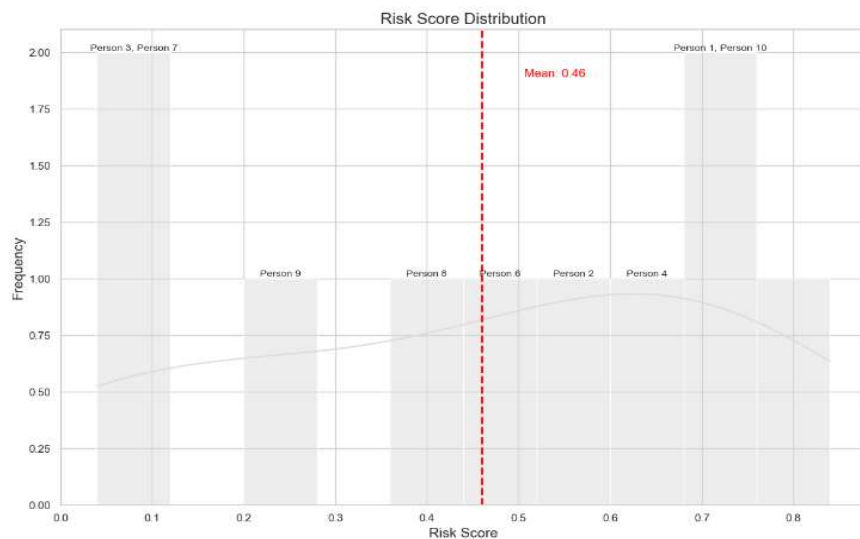
Each individual is assigned a risk score ranging from 0 to 1.

A risk score closer to 1 indicates a higher risk, while a score closer to 0 indicates a lower risk.

Red Dashed Line: The red dashed line represents the mean risk score of the group. This line helps you understand the average risk level and compare individual scores against it.

Identify Outliers: The risk score distribution helps identify individuals with exceptionally high or low risk scores, which can be outliers

Total Fees vs Difference in Fees

Boxplot of Difference in Fees to Identify Outliers
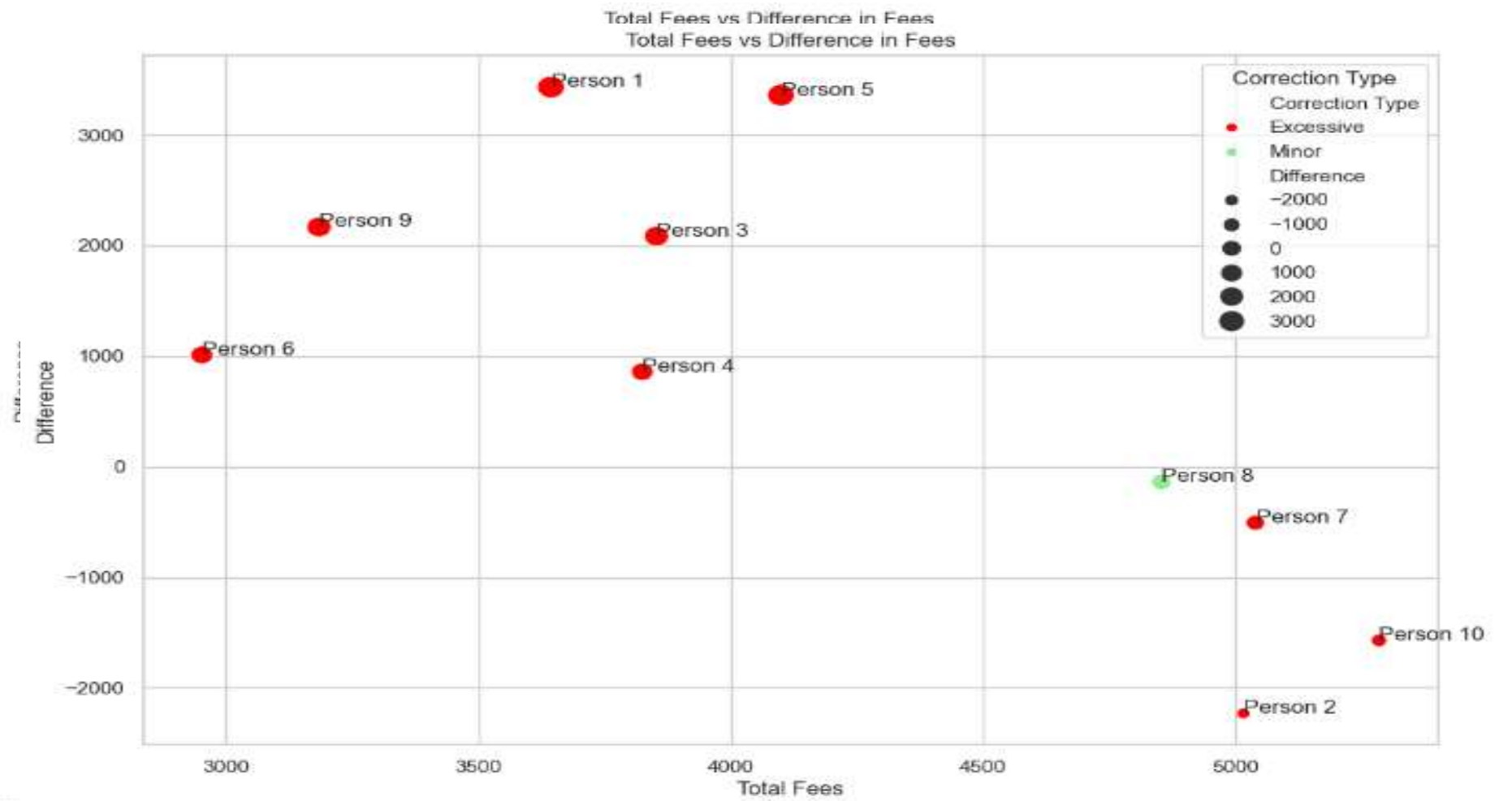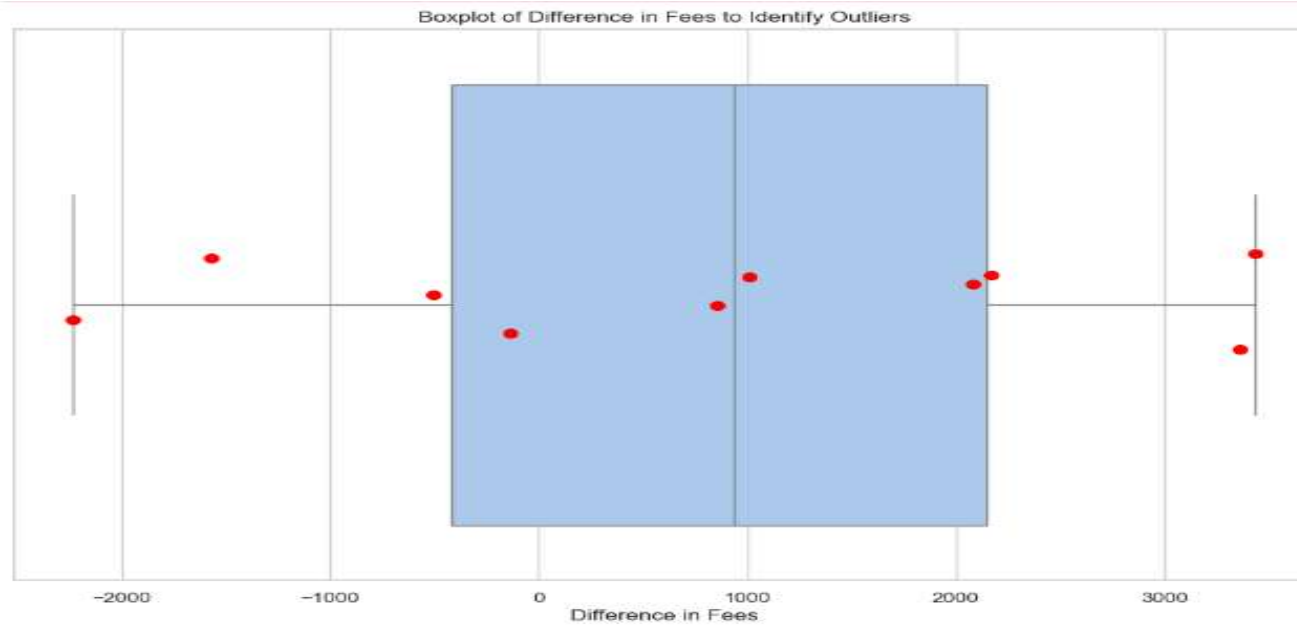
- · **Person 1** with a difference of 3432.08
- · **Person 2** with a difference of -2230.39
- · **Person 3** with a difference of 2083.99
- · **Person 5** with a difference of 3358.91
- · **Person 9** with a difference of 2167.24
- · **Person 10** with a difference of -1570.65