KNN Model Performance

Train/Test Split: 60.0/40.0, K=2

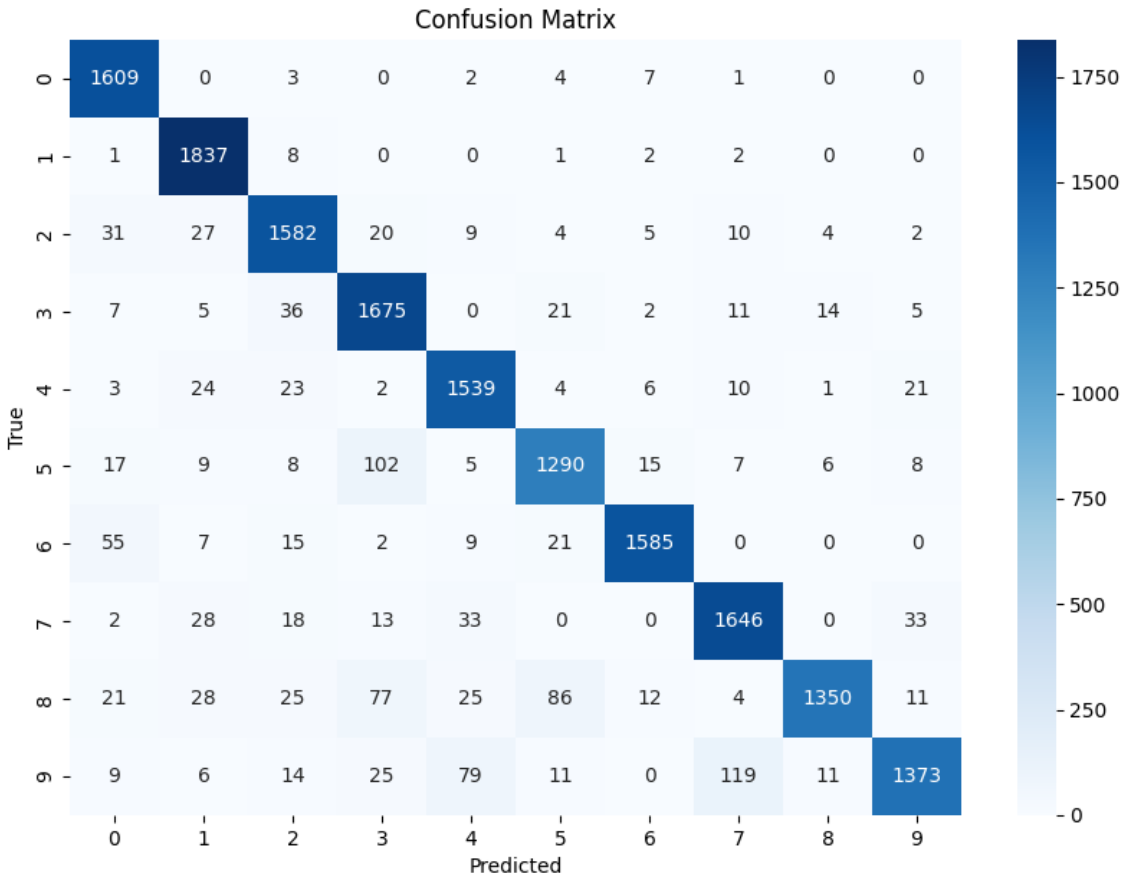
Accuracy: 92.18%

Confusion Matrix:

```
[[1609    0    3    0    2    4    7    1    0    0]
 [   1 1837    8    0    0    1    2    2    0    0]
 [  31   27 1582   20    9    4    5   10    4    2]
 [   7    5   36 1675    0   21    2   11   14    5]
 [   3   24   23    2 1539    4    6   10    1   21]
 [  17    9    8  102    5 1290   15    7    6    8]
 [  55    7   15    2    9   21 1585    0    0    0]
 [   2   28   18   13   33    0    0 1646    0   33]
 [  21   28   25   77   25   86   12    4 1350   11]
 [   9    6   14   25   79   11    0  119   11 1373]]
```

KNN Model Performance

Train/Test Split: 60.0/40.0, K=2



Train/Test Split: 60.0/40.0, K=4

Accuracy: 93.17%

Confusion Matrix:

[[1598 2 4 1 2 2 13 1 2 1]

[0 1836 8 0 0 0 5 1 1 0]

[26 23 1568 25 5 3 10 17 9 8]

[7 7 19 1677 0 24 1 15 15 11]

[3 25 18 2 1524 6 8 4 2 41]

[9 11 5 67 4 1321 26 4 8 12]

KNN Model Performance

[40 4 11 0 10 19 1608 0 2 0]

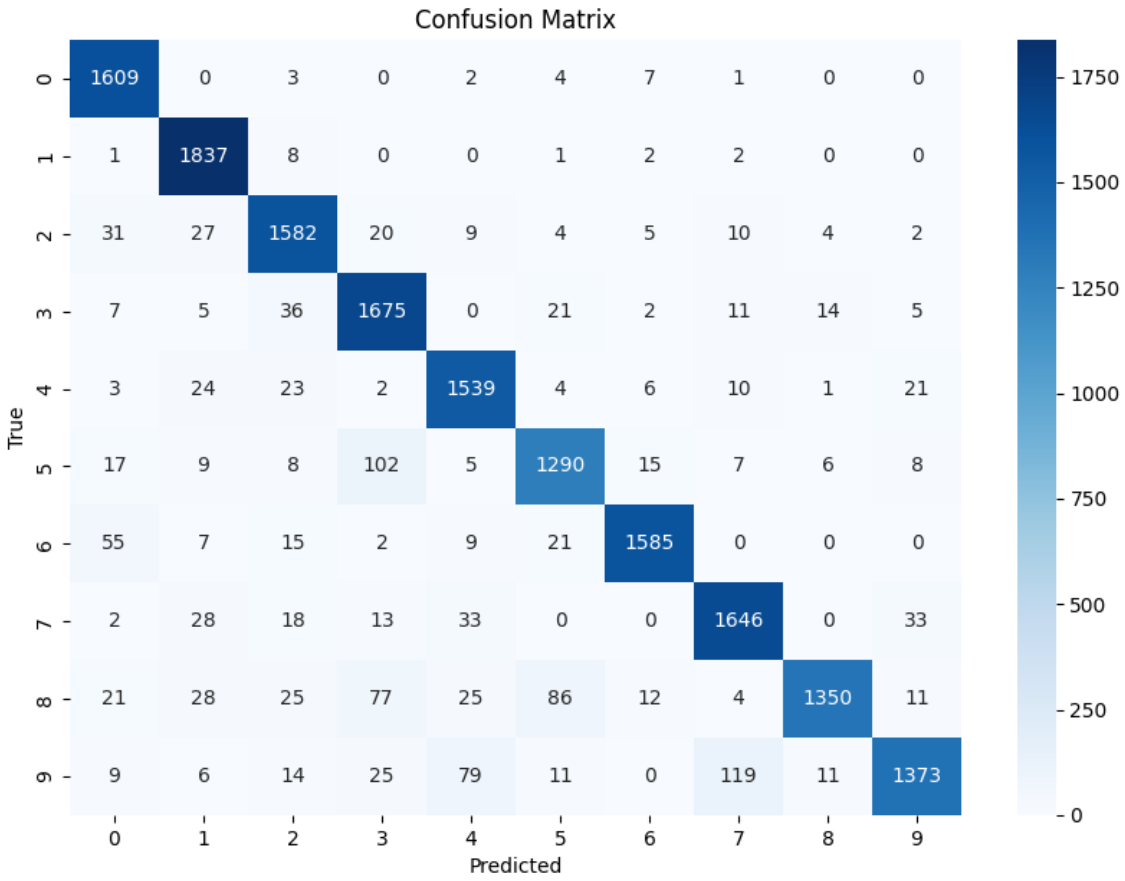
[3 31 8 6 24 0 0 1651 0 50]

[19 20 15 56 19 65 13 3 1415 14]

[11 6 10 21 46 4 0 86 9 1454]]

KNN Model Performance

Train/Test Split: 60.0/40.0, K=4



Train/Test Split: 60.0/40.0, K=5

Accuracy: 93.35%

Confusion Matrix:

[[1596 1 5 2 2 3 13 1 2 1]

[0 1836 6 0 0 1 6 1 1 0]

[21 25 1557 31 9 3 12 15 14 7]

[7 6 11 1676 0 27 1 18 20 10]

[3 23 14 3 1513 8 8 6 1 54]

[10 10 7 57 6 1325 29 5 8 10]

KNN Model Performance

[30 4 8 0 8 16 1626 0 2 0]

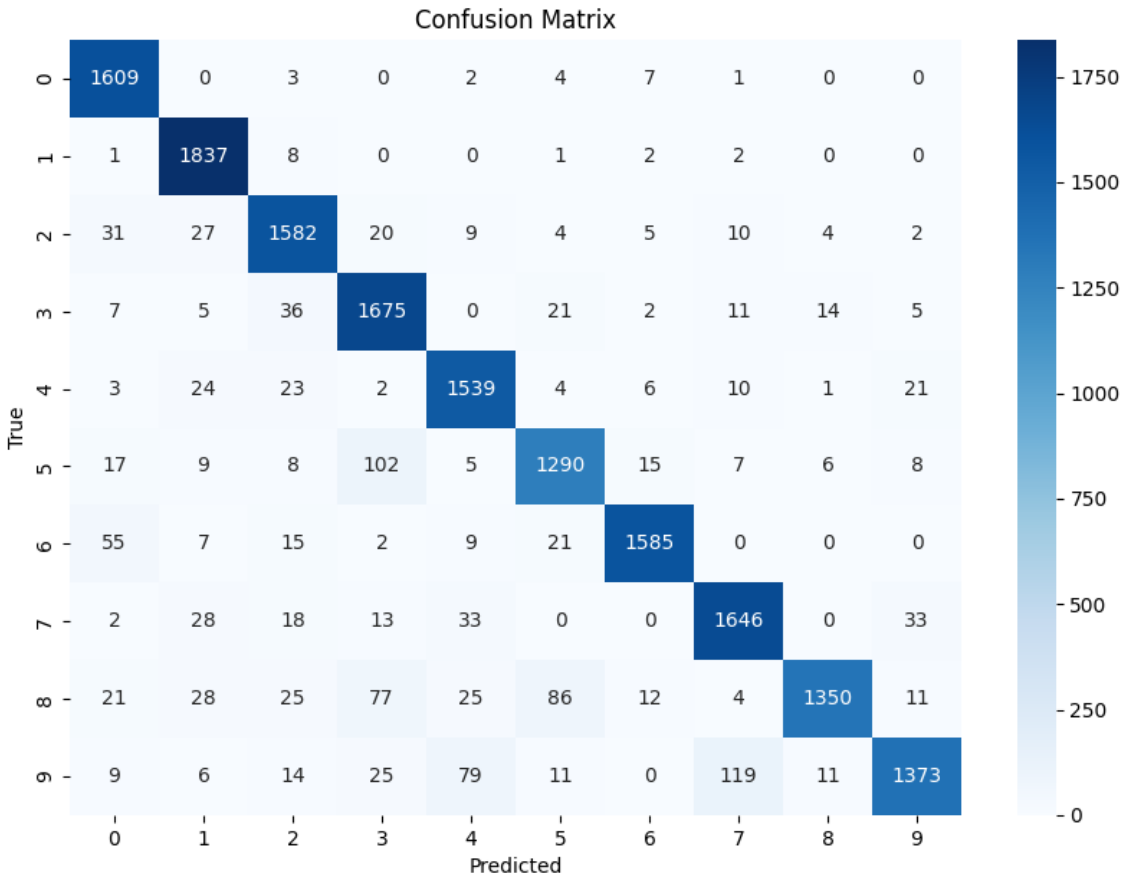
[3 31 9 6 19 0 0 1633 0 72]

[17 19 9 44 18 58 12 3 1445 14]

[8 7 10 23 36 6 0 74 8 1475]]

KNN Model Performance

Train/Test Split: 60.0/40.0, K=5



Train/Test Split: 60.0/40.0, K=6

Accuracy: 93.15%

Confusion Matrix:

[[1599 1 7 3 1 3 11 0 0 1]

[0 1836 6 0 0 1 6 0 1 1]

[25 29 1555 27 8 3 12 17 14 4]

[7 7 12 1675 0 25 1 20 17 12]

[4 24 17 1 1519 8 7 3 1 49]

[11 10 7 66 7 1317 30 3 5 11]

KNN Model Performance

[33 4 7 0 9 18 1621 0 2 0]

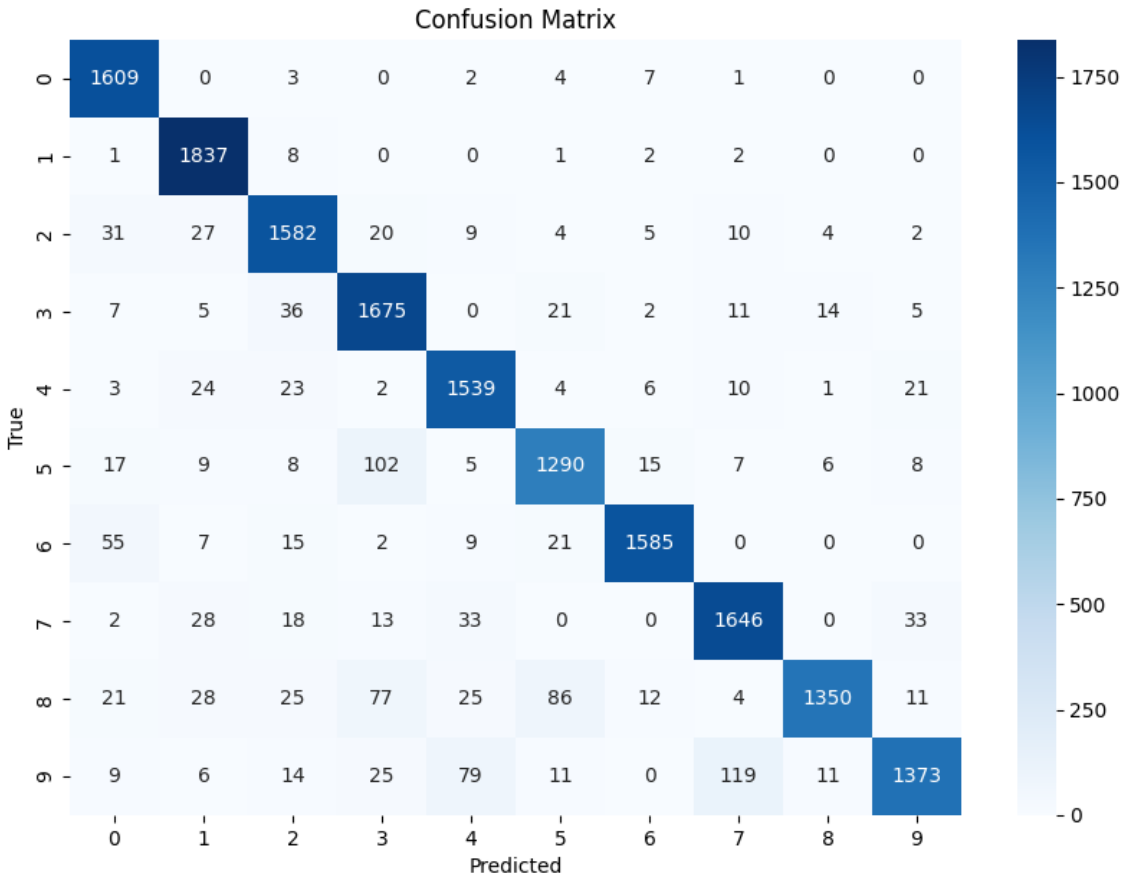
[2 33 10 7 25 0 0 1642 0 54]

[18 28 11 51 20 59 10 3 1426 13]

[10 8 10 24 42 4 0 81 9 1459]]

KNN Model Performance

Train/Test Split: 60.0/40.0, K=6



Train/Test Split: 60.0/40.0, K=7

Accuracy: 93.04%

Confusion Matrix:

[[1595 2 5 2 1 4 15 0 0 2]

[0 1835 6 0 1 0 6 0 2 1]

[24 30 1540 31 7 3 14 23 16 6]

[7 6 12 1666 1 31 2 21 19 11]

[4 22 14 2 1507 8 10 5 2 59]

[10 11 6 52 5 1325 32 4 9 13]

KNN Model Performance

[28 3 5 0 9 18 1627 0 4 0]

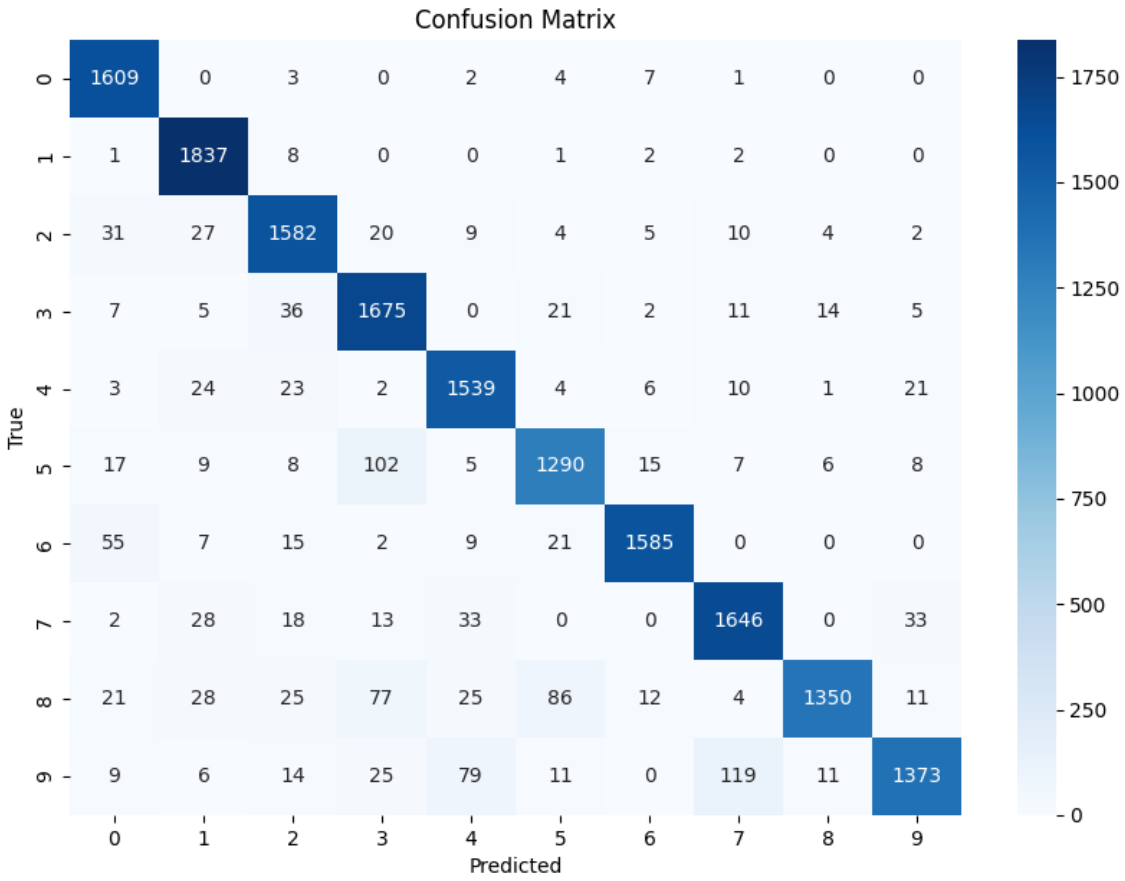
[2 34 8 6 23 0 0 1618 0 82]

[20 23 9 41 17 56 11 3 1444 15]

[11 8 11 23 35 4 0 73 9 1473]]

KNN Model Performance

Train/Test Split: 60.0/40.0, K=7



Train/Test Split: 60.0/40.0, K=10

Accuracy: 92.79%

Confusion Matrix:

[[1597 2 4 3 0 3 15 0 0 2]

[0 1837 6 0 0 1 6 1 0 0]

[28 33 1528 29 9 3 15 24 21 4]

[7 7 11 1672 0 27 3 23 15 11]

[2 24 15 3 1507 10 10 5 1 56]

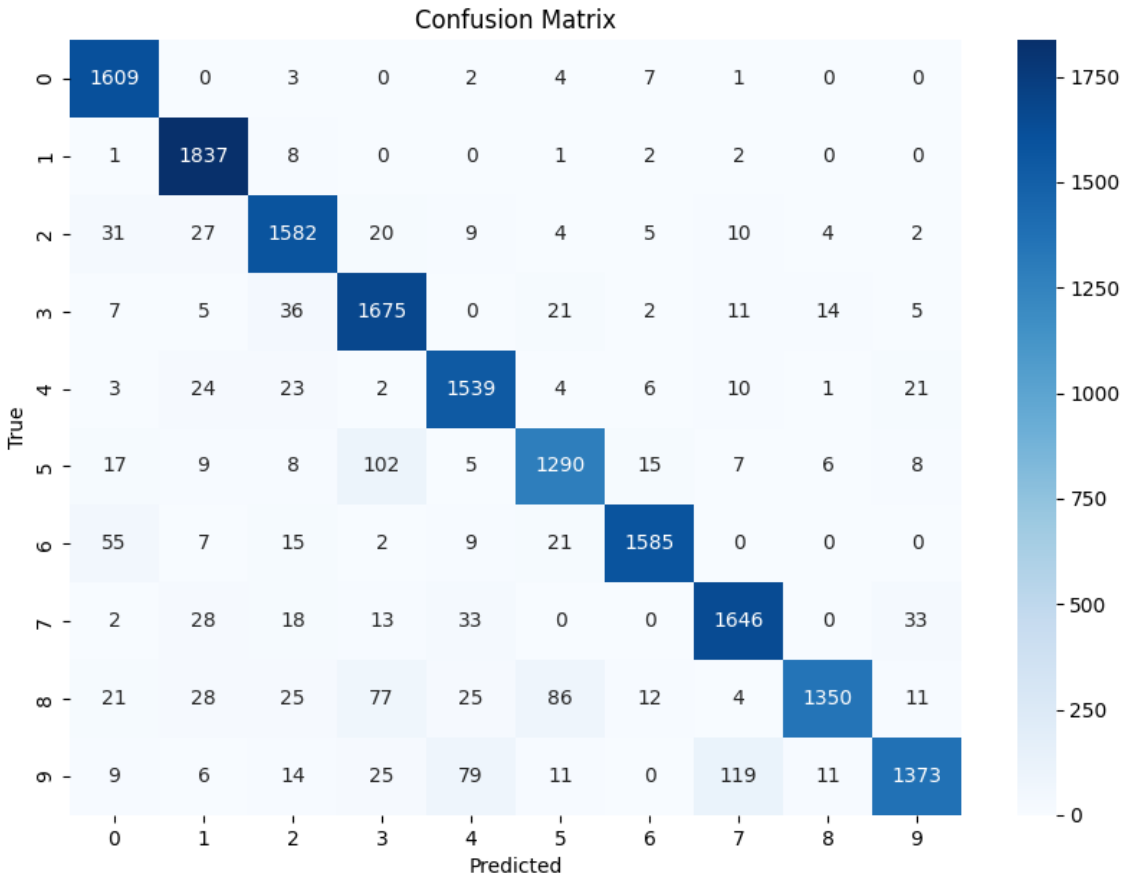
[10 9 8 64 3 1310 34 5 7 17]

KNN Model Performance

```
[ 30   4   5   0   6  18 1628   0   3   0]
[  1  36   9   6  23   1   0 1622   0  75]
[ 20  28   7  46  18  65   9   3 1429  14]
[ 12   8  11  23  38   2   0  84  10 1459]]
```

KNN Model Performance

Train/Test Split: 60.0/40.0, K=10



Train/Test Split: 70.0/30.000000000000004, K=2

Accuracy: 92.45%

Confusion Matrix:

[[1190 0 2 0 1 1 5 1 0 0]

[1 1379 6 0 0 1 1 1 0 0]

[25 18 1208 15 9 3 4 8 4 0]

[7 3 28 1272 0 17 2 10 11 5]

[1 13 19 2 1156 3 5 6 0 18]

[11 5 5 80 5 959 11 4 3 2]

KNN Model Performance

[40 4 11 2 8 15 1176 0 0 0]

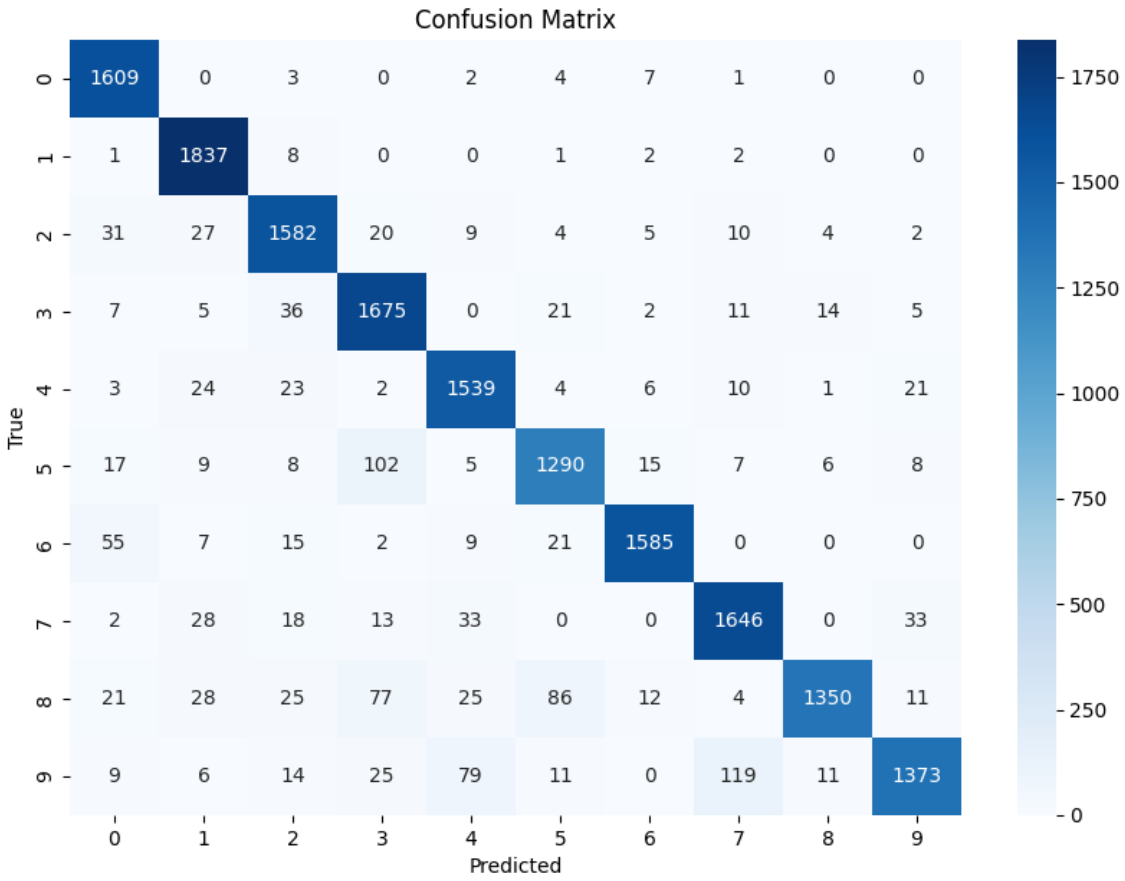
[1 25 13 11 24 0 0 1259 0 26]

[10 16 17 50 20 66 10 3 1010 7]

[9 3 9 18 60 5 0 77 9 1041]]

KNN Model Performance

Train/Test Split: 70.0/30.000000000000004, K=2



Train/Test Split: 70.0/30.000000000000004, K=4

Accuracy: 93.55%

Confusion Matrix:

[[1181 0 2 1 2 1 12 0 0 1]

[0 1380 5 0 0 1 2 0 1 0]

[24 16 1206 14 1 3 7 11 9 3]

[6 4 16 1279 0 19 0 12 11 8]

[1 15 16 2 1152 4 6 5 1 21]

[8 4 4 52 2 982 17 3 5 8]

KNN Model Performance

[28 3 9 0 5 13 1198 0 0 0]

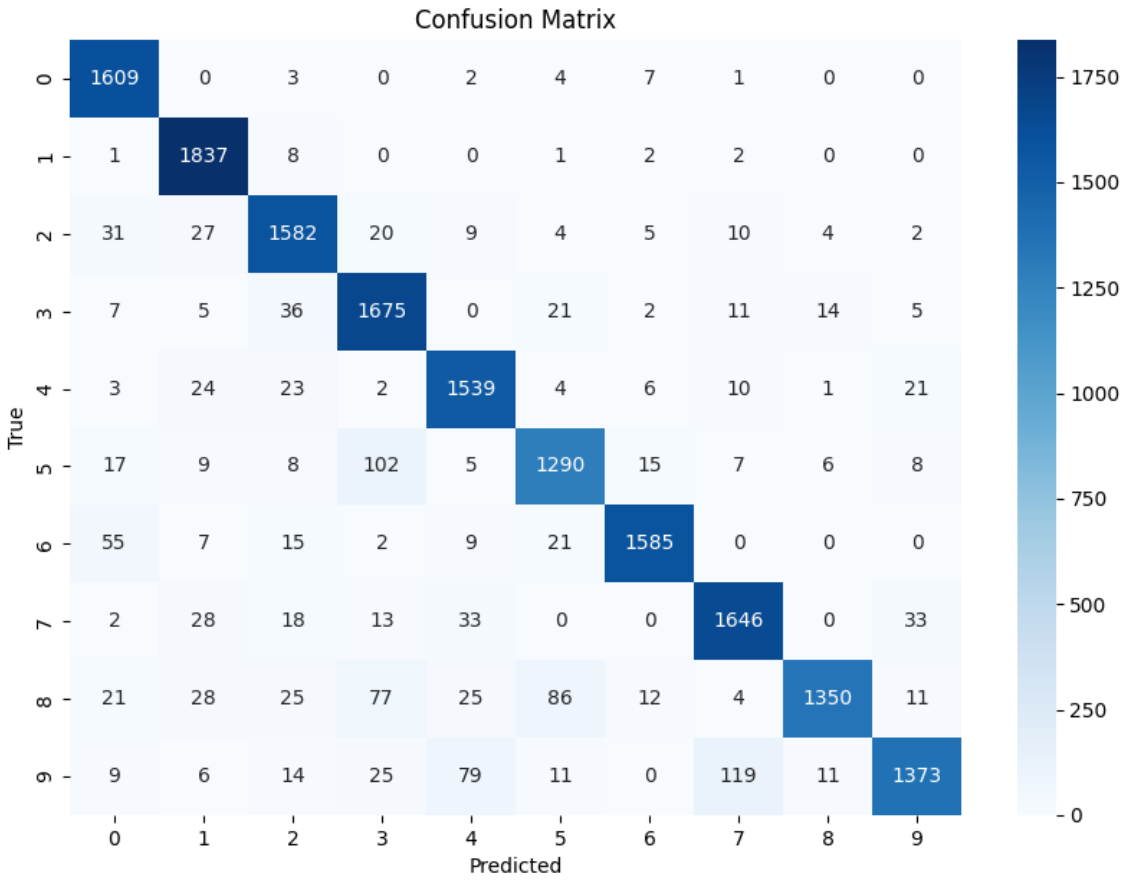
[1 25 7 6 21 0 0 1263 0 36]

[11 17 11 36 16 50 7 2 1049 10]

[12 3 7 16 34 1 0 53 7 1098]]

KNN Model Performance

Train/Test Split: 70.0/30.000000000000004, K=4



Train/Test Split: 70.0/30.000000000000004, K=5

Accuracy: 93.77%

Confusion Matrix:

[[1183 0 3 0 1 1 11 0 0 1]

[0 1381 4 0 0 1 2 0 1 0]

[14 14 1206 21 2 3 9 9 11 5]

[6 4 8 1270 0 26 1 15 16 9]

[2 12 13 3 1140 6 9 4 0 34]

[6 5 6 44 2 988 21 3 2 8]

KNN Model Performance

[20 4 7 0 5 10 1209 0 1 0]

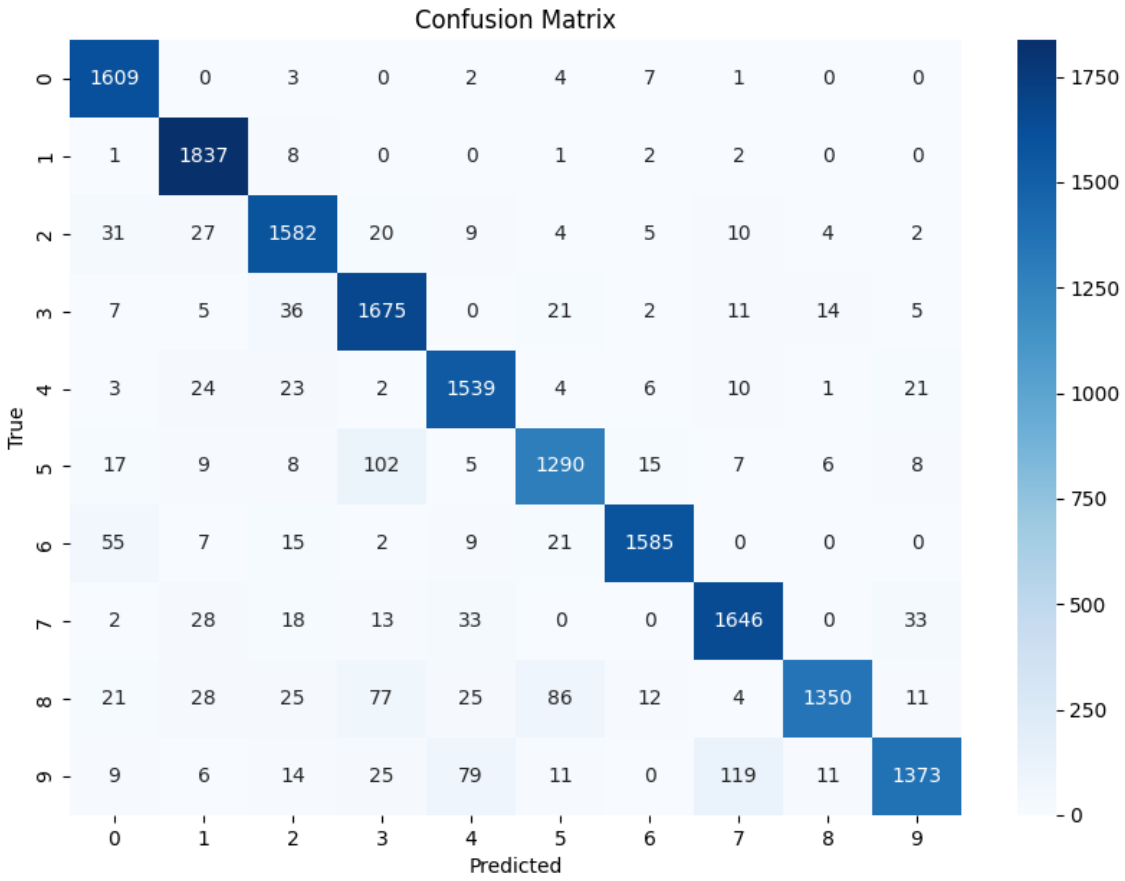
[2 25 8 6 16 0 0 1251 0 51]

[10 15 7 29 15 46 7 2 1067 11]

[10 3 7 16 20 3 0 45 6 1121]]

KNN Model Performance

Train/Test Split: 70.0/30.000000000000004, K=5



Train/Test Split: 70.0/30.000000000000004, K=6

Accuracy: 93.40%

Confusion Matrix:

[[1185 0 3 0 1 1 9 0 0 1]

[0 1379 4 0 0 1 4 0 1 0]

[19 15 1199 19 4 3 8 12 11 4]

[5 5 10 1273 0 23 1 15 14 9]

[2 15 16 2 1146 6 7 1 1 27]

[8 5 5 55 1 979 20 3 2 7]

KNN Model Performance

[25 3 6 0 8 13 1200 0 1 0]

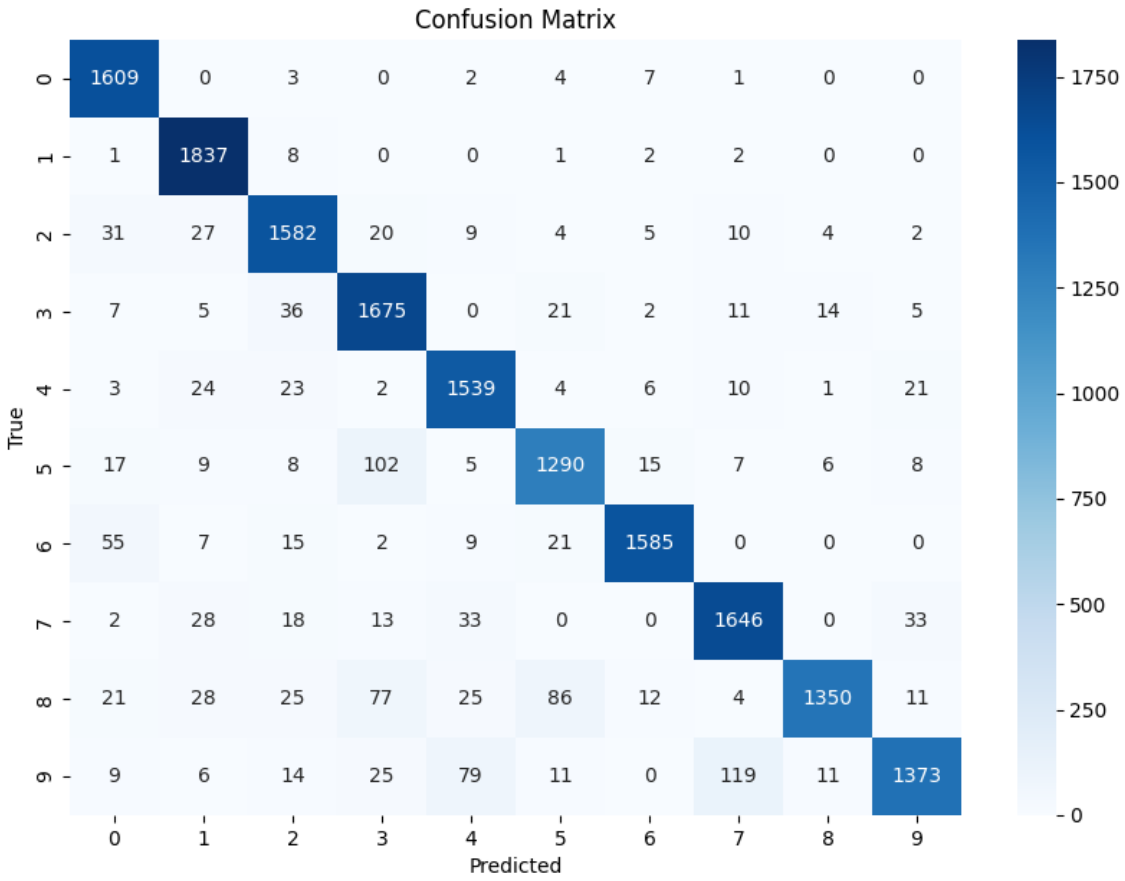
[2 28 8 6 22 0 0 1252 0 41]

[12 20 7 31 18 46 6 2 1055 12]

[12 3 7 17 27 0 0 57 7 1101]]

KNN Model Performance

Train/Test Split: 70.0/30.000000000000004, K=6



Train/Test Split: 70.0/30.000000000000004, K=7

Accuracy: 93.63%

Confusion Matrix:

[[1184 0 2 1 1 2 9 0 0 1]

[0 1380 4 0 0 1 3 0 1 0]

[18 19 1193 23 3 3 9 11 11 4]

[6 5 9 1269 0 27 0 14 15 10]

[2 15 12 2 1141 7 8 2 1 33]

[6 6 4 43 3 987 23 3 3 7]

KNN Model Performance

[17 3 4 0 6 10 1215 0 1 0]

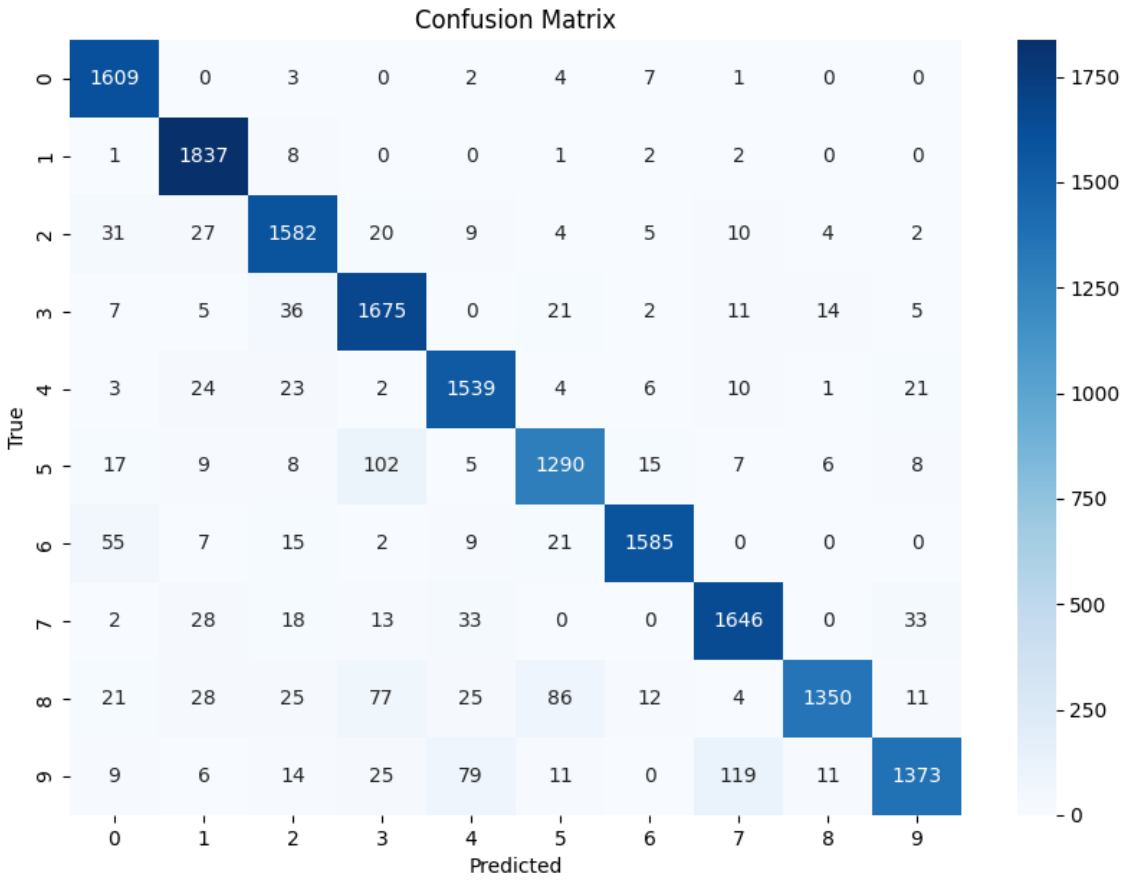
[2 28 8 5 22 0 0 1241 0 53]

[13 19 6 26 14 36 7 2 1072 14]

[9 3 7 18 22 1 0 48 7 1116]]

KNN Model Performance

Train/Test Split: 70.0/30.000000000000004, K=7



Train/Test Split: 70.0/30.000000000000004, K=10

Accuracy: 93.18%

Confusion Matrix:

[[1184 0 2 1 0 1 11 0 0 1]

[0 1380 4 0 0 1 3 0 1 0]

[23 21 1177 21 5 3 8 16 16 4]

[5 6 10 1273 0 22 1 17 12 9]

[2 14 12 2 1138 7 6 2 1 39]

[7 6 6 48 3 976 22 4 3 10]

KNN Model Performance

[22 2 4 0 7 13 1206 0 2 0]

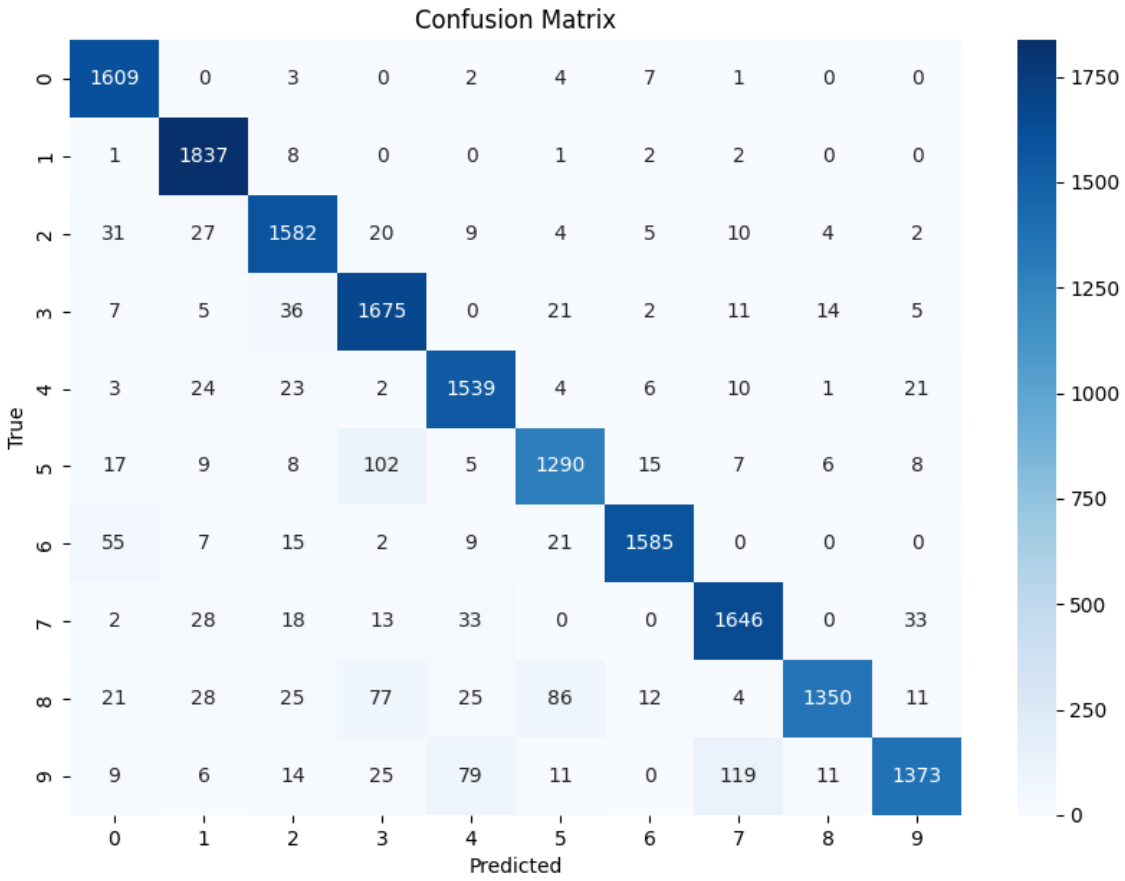
[1 30 7 6 20 0 0 1242 1 52]

[10 23 4 31 16 43 7 2 1062 11]

[11 2 7 19 23 0 0 60 5 1104]]

KNN Model Performance

Train/Test Split: 70.0/30.000000000000004, K=10



Train/Test Split: 75.0/25.0, K=2

Accuracy: 92.68%

Confusion Matrix:

[[1017 0 3 0 0 1 4 0 0 0]

[1 1138 4 0 0 1 1 1 0 0]

[21 18 1000 10 9 3 4 4 3 0]

[5 3 22 1080 0 14 2 9 11 5]

[1 9 16 2 975 2 5 2 0 12]

[8 4 3 54 4 809 10 1 3 2]

KNN Model Performance

[31 3 8 2 3 13 950 0 0 0]

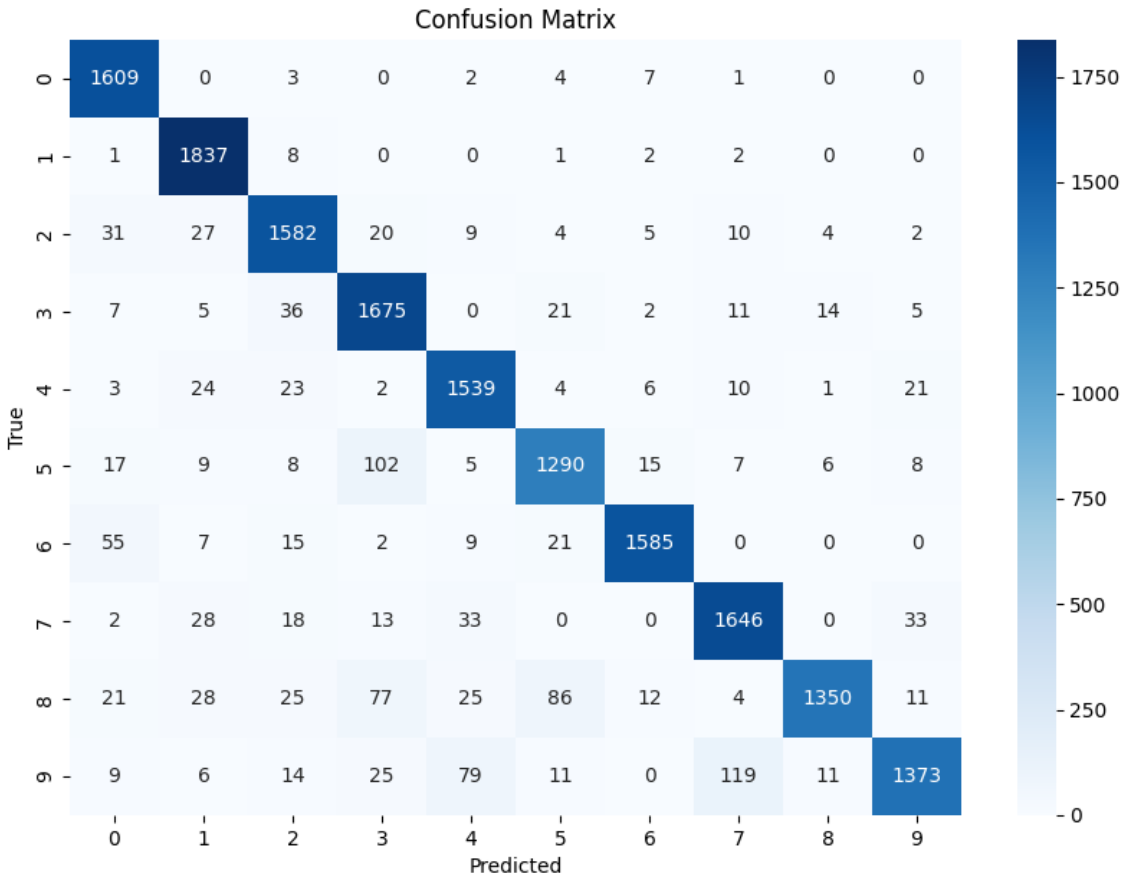
[1 23 11 8 19 1 0 1050 0 22]

[10 16 13 41 17 57 6 3 838 4]

[8 2 9 16 52 4 0 62 7 874]]

KNN Model Performance

Train/Test Split: 75.0/25.0, K=2



Train/Test Split: 75.0/25.0, K=4

Accuracy: 93.75%

Confusion Matrix:

[[1010 0 2 1 1 1 10 0 0 0]

[0 1139 3 0 0 1 2 0 1 0]

[20 16 997 9 2 3 8 8 6 3]

[5 3 12 1089 0 13 0 12 9 8]

[1 12 13 1 970 2 5 4 1 15]

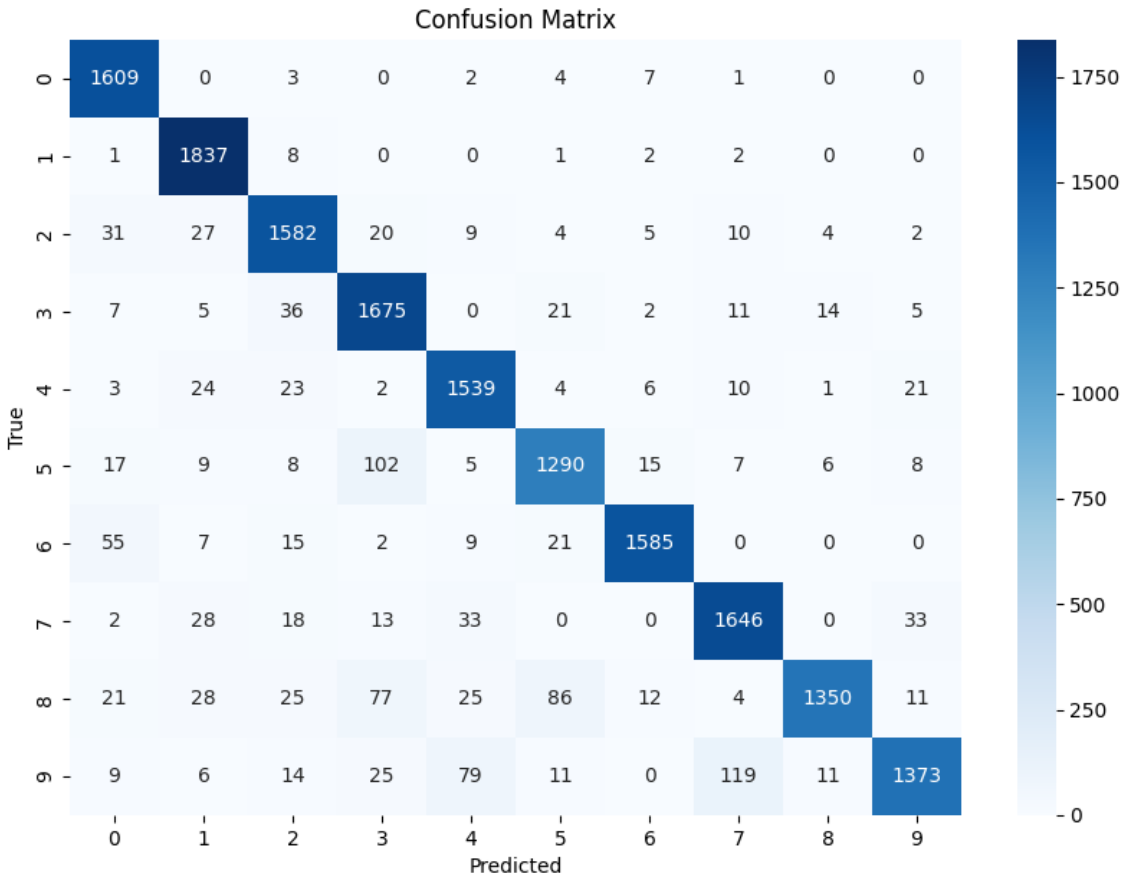
[5 3 2 36 2 826 14 1 4 5]

KNN Model Performance

```
[ 23   2   7   0   2  13 963   0   0   0]
[  1  24   5   5  14   0   0 1055   0  31]
[ 10  17  10  29  13  43   5   2 869   7]
[  8   3   7  14  26   1   0  43   6 926]]
```

KNN Model Performance

Train/Test Split: 75.0/25.0, K=4



Train/Test Split: 75.0/25.0, K=5

Accuracy: 93.87%

Confusion Matrix:

[[1010 0 3 0 2 1 9 0 0 0]

[0 1140 2 0 0 1 2 0 1 0]

[15 14 995 16 2 3 8 6 8 5]

[5 4 4 1084 0 19 1 13 12 9]

[2 9 11 2 955 4 8 3 1 29]

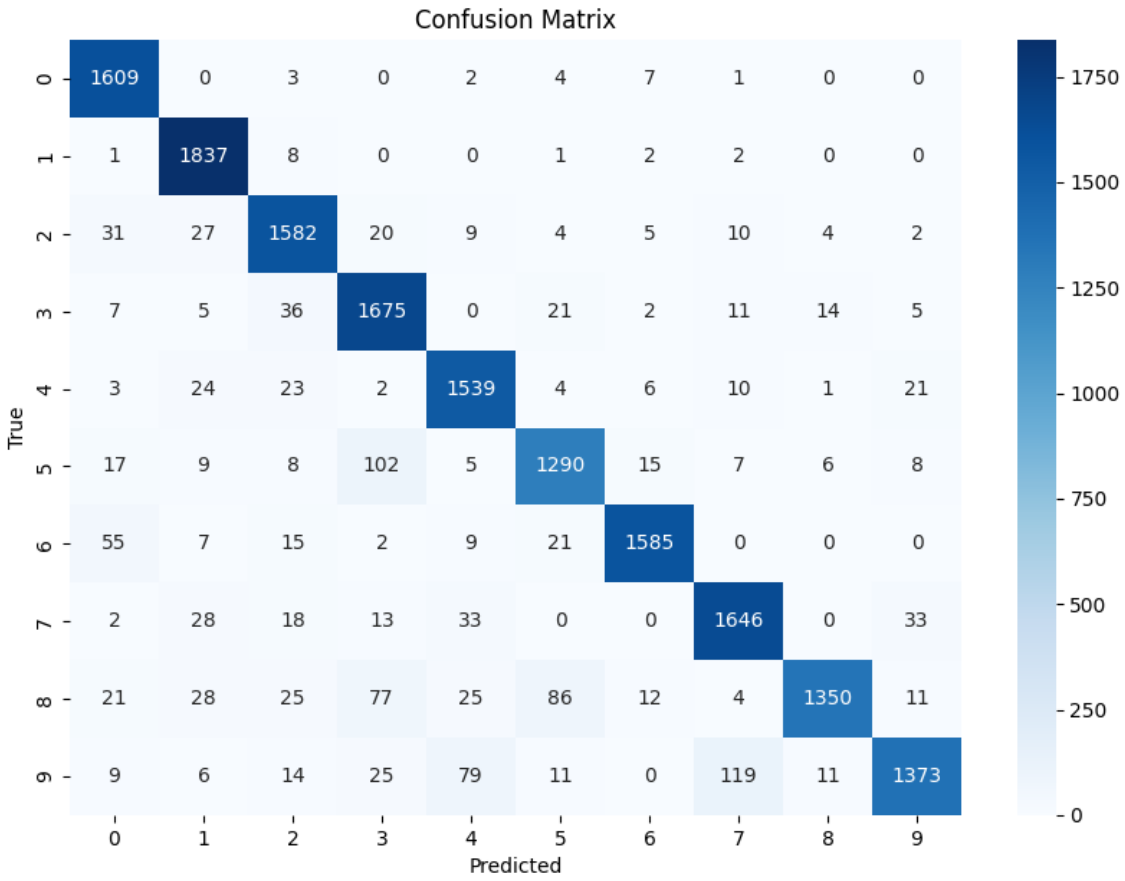
[5 3 3 31 2 828 18 1 2 5]

KNN Model Performance

```
[ 17   3   5   0   2  10 972   0   1   0]
[  2  24   7   6  12   0   0 1044   0  40]
[  8  17   7  24  11  41   5   2 883   7]
[  7   3   7  14  16   2   0  35   5 945]]
```

KNN Model Performance

Train/Test Split: 75.0/25.0, K=5



Train/Test Split: 75.0/25.0, K=6

Accuracy: 93.58%

Confusion Matrix:

[[1013 0 3 0 1 1 7 0 0 0]

[0 1139 2 0 0 1 3 0 1 0]

[15 15 995 14 3 3 8 7 8 4]

[5 4 7 1084 0 17 1 12 11 10]

[2 12 11 2 961 4 7 3 0 22]

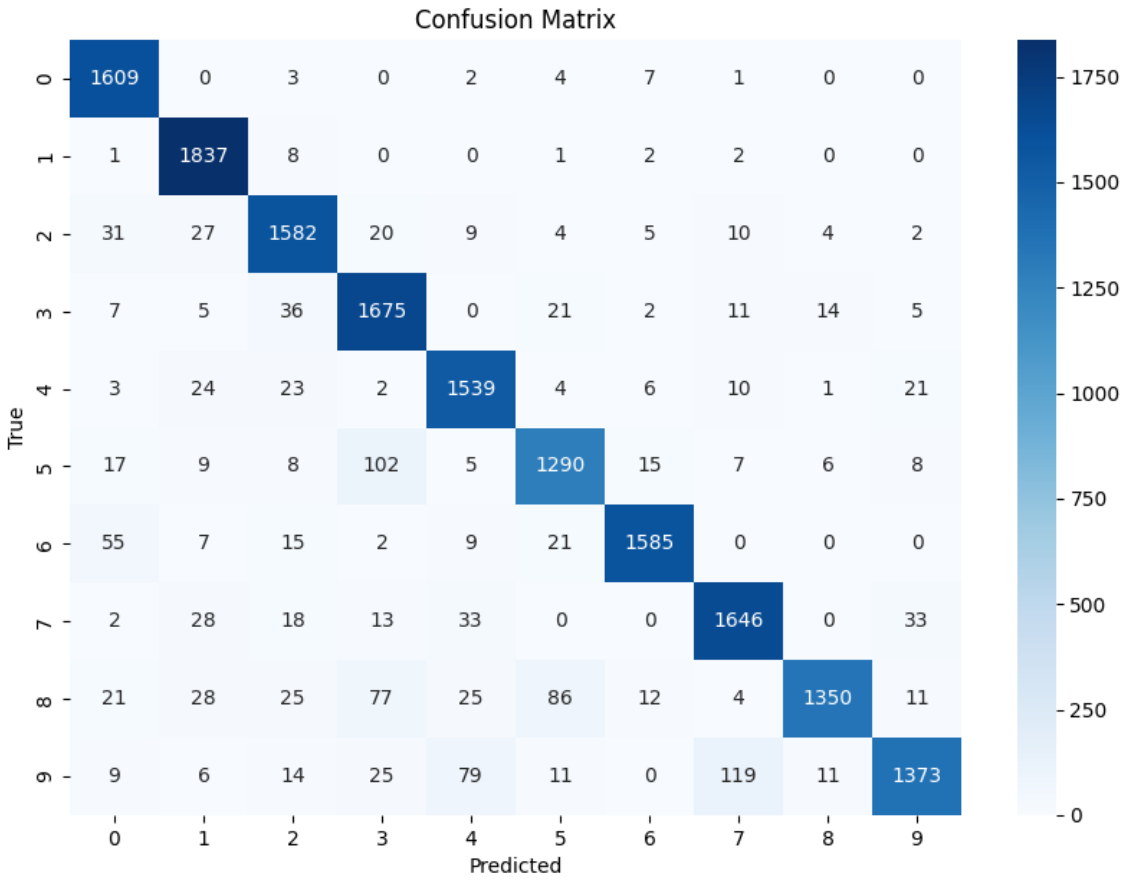
[4 2 4 44 1 818 20 1 0 4]

KNN Model Performance

```
[ 19   3   5   0   4  12 966   0   1   0]
[  2  28   5   6  14   0   0 1044   0  36]
[ 10  20   7  25  14  43   4   2 873   7]
[  9   3   7  13  22   0   0  41   6 933]]
```

KNN Model Performance

Train/Test Split: 75.0/25.0, K=6



Train/Test Split: 75.0/25.0, K=7

Accuracy: 93.78%

Confusion Matrix:

[[1011 0 2 1 2 2 7 0 0 0]

[0 1139 2 0 0 1 3 0 1 0]

[15 17 993 15 3 3 9 5 8 4]

[5 4 7 1082 0 19 1 10 13 10]

[2 11 10 2 956 5 7 3 0 28]

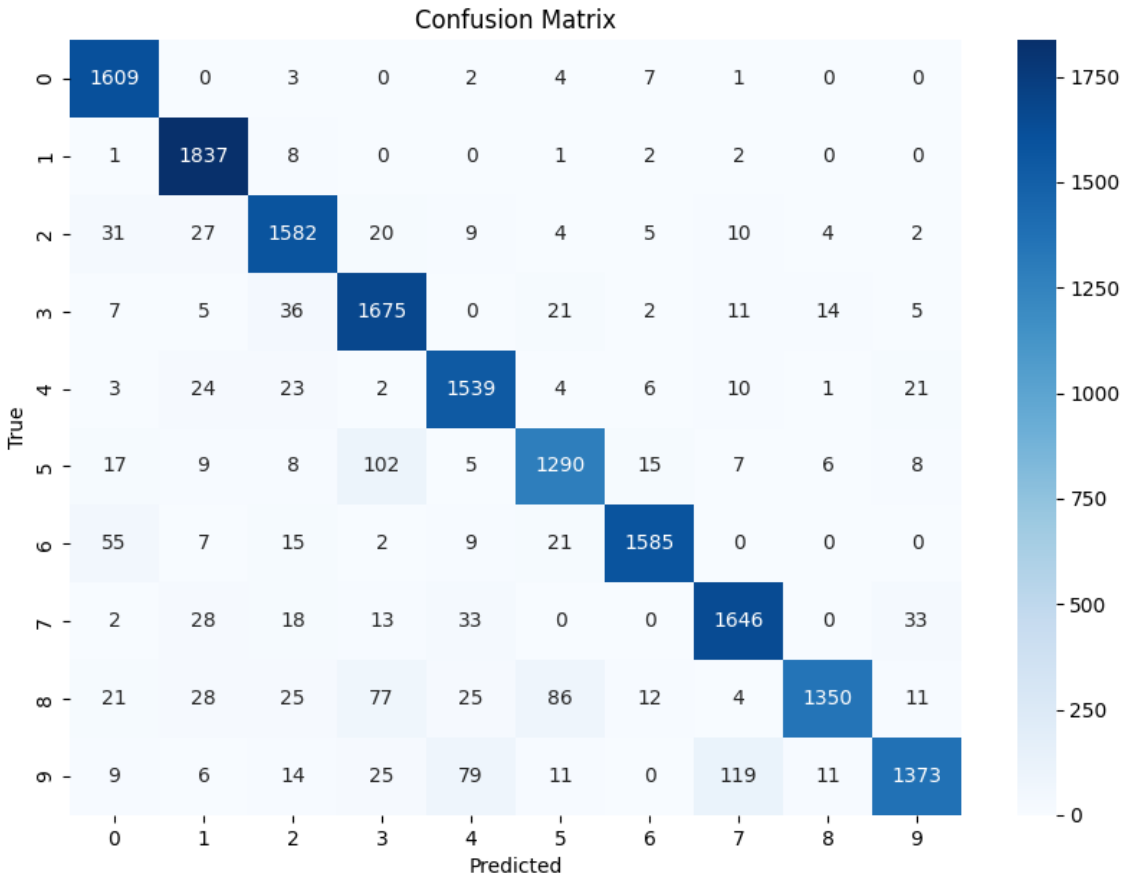
[5 4 2 31 3 825 20 1 2 5]

KNN Model Performance

```
[ 14   3   3   0   3  10 976   0   1   0]
[  2  27   6   5  16   0   0 1036   0  43]
[ 10  19   6  23  13  33   4   2 888   7]
[  8   3   7  13  19   1   0  36   6 941]]
```

KNN Model Performance

Train/Test Split: 75.0/25.0, K=7



Train/Test Split: 75.0/25.0, K=10

Accuracy: 93.42%

Confusion Matrix:

[[1014 0 1 0 0 1 9 0 0 0]

[0 1138 2 0 1 1 3 0 1 0]

[18 19 980 15 5 3 9 9 11 3]

[4 5 4 1091 0 16 1 12 9 9]

[2 9 11 2 955 5 7 1 0 32]

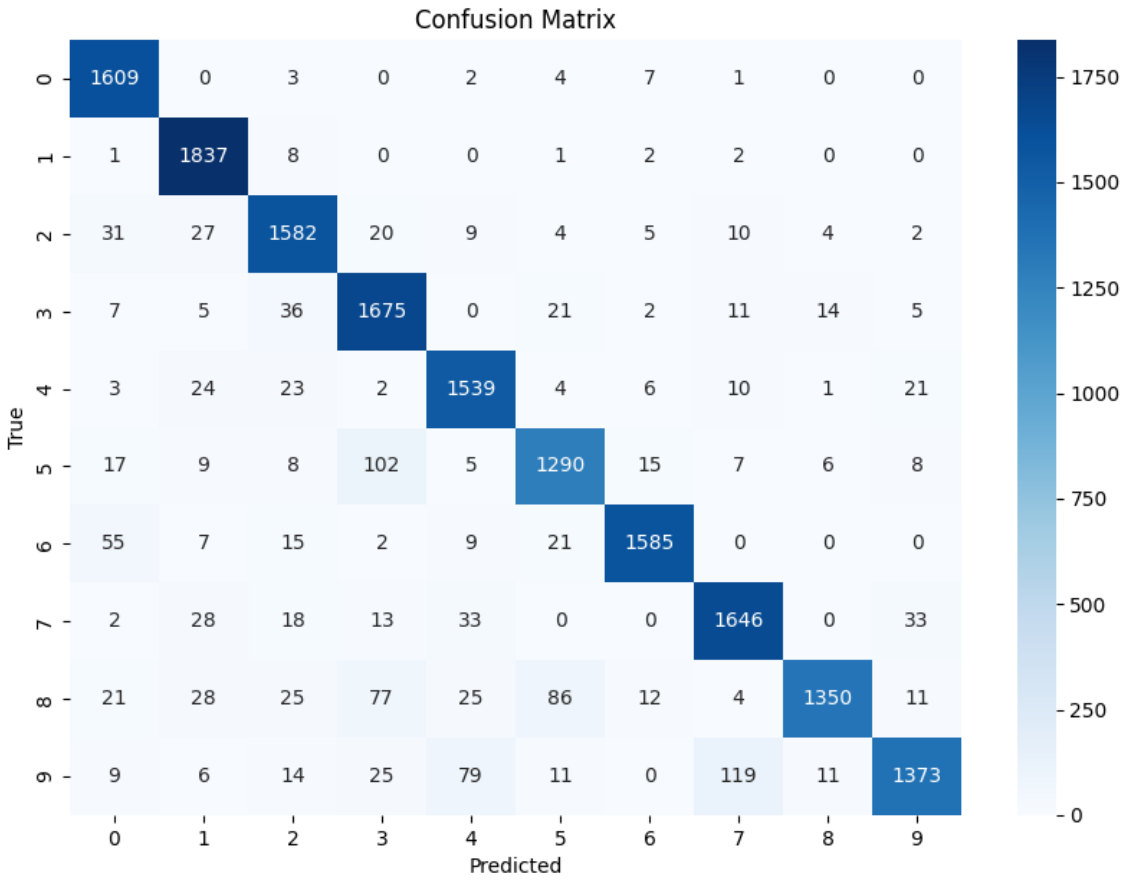
[6 3 3 36 4 814 20 3 4 5]

KNN Model Performance

```
[ 18   1   3   0   3  12 972   0   1   0]
[  1  29   6   7  15   0   0 1032   0  45]
[  8  23   6  24  11  37   5   2 882   7]
[  7   3   7  15  19   1   0  47   4 931]]
```

KNN Model Performance

Train/Test Split: 75.0/25.0, K=10



Train/Test Split: 80.0/19.999999999999996, K=2

Accuracy: 93.00%

Confusion Matrix:

[[809 0 2 0 0 1 4 0 0 0]

[1 902 4 0 0 1 1 0 0 0]

[12 16 790 8 8 3 2 3 3 1]

[4 3 16 878 0 11 2 6 12 5]

[1 6 9 2 804 1 4 3 0 9]

[5 3 3 36 3 639 8 1 2 2]

KNN Model Performance

[22 1 6 2 2 7 745 0 0 0]

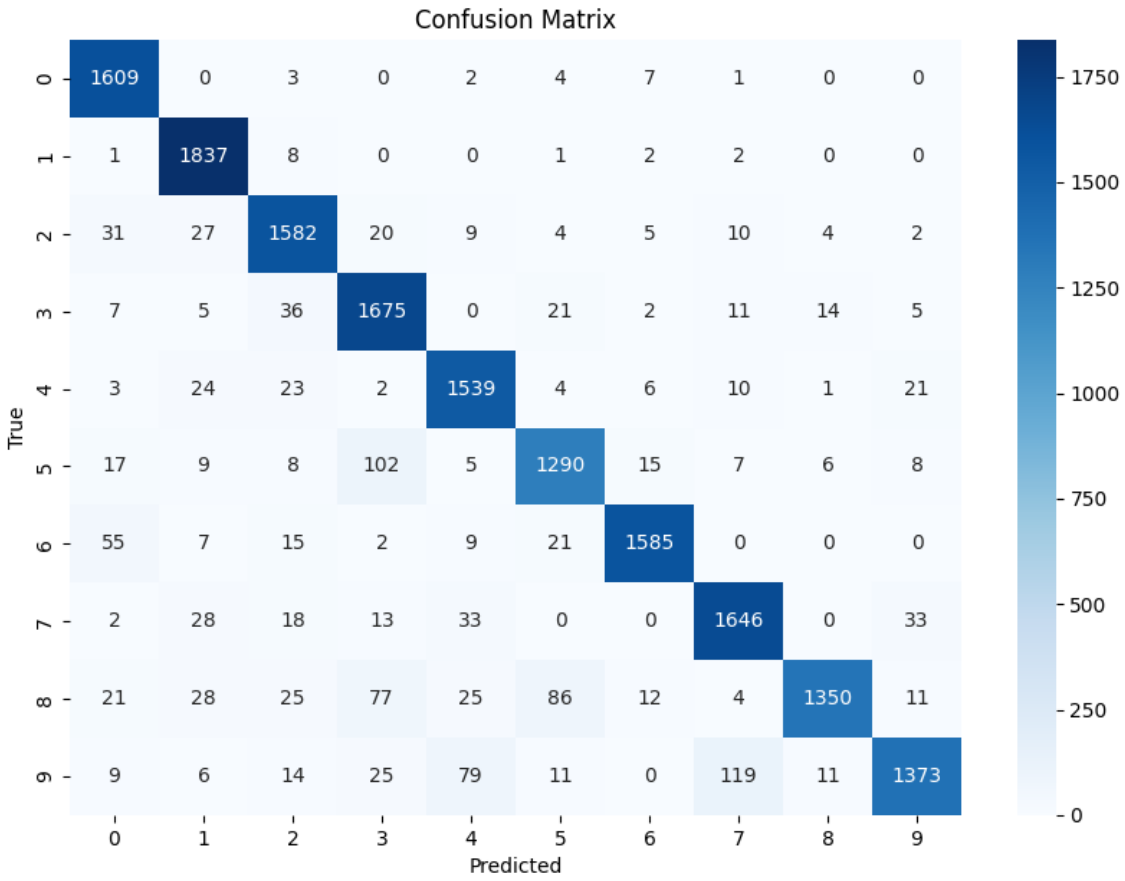
[1 16 8 7 14 1 0 831 0 15]

[10 14 8 34 16 47 5 3 695 3]

[6 2 3 14 40 3 0 45 6 719]]

KNN Model Performance

Train/Test Split: 80.0/19.999999999999996, K=2



Train/Test Split: 80.0/19.999999999999996, K=4

Accuracy: 93.89%

Confusion Matrix:

[[801 0 2 1 0 2 10 0 0 0]

[0 901 3 0 0 1 2 0 1 1]

[13 13 790 6 1 3 6 6 6 2]

[3 3 8 886 0 12 1 7 9 8]

[2 6 7 1 803 1 4 4 0 11]

[5 1 2 27 3 643 10 1 5 5]

KNN Model Performance

[16 1 5 0 1 9 753 0 0 0]

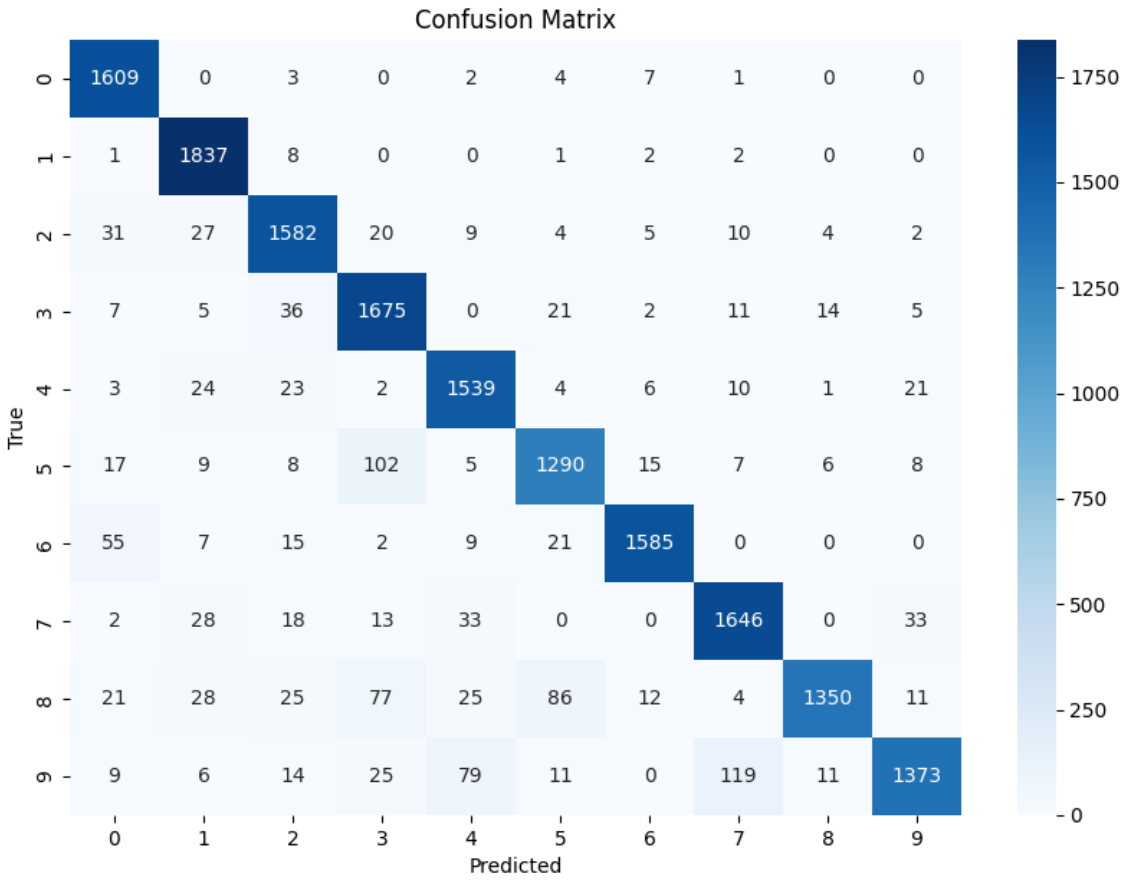
[1 15 3 5 12 0 0 832 0 25]

[7 14 9 21 13 35 5 2 724 5]

[6 3 2 12 19 2 0 35 5 754]]

KNN Model Performance

Train/Test Split: 80.0/19.999999999999996, K=4



Train/Test Split: 80.0/19.999999999999996, K=5

Accuracy: 94.01%

Confusion Matrix:

[[802 0 3 0 0 1 10 0 0 0]

[0 903 2 0 0 1 2 0 1 0]

[9 11 791 12 1 3 5 3 8 3]

[4 4 2 883 0 16 1 9 9 9]

[2 6 5 2 786 2 6 3 0 27]

[5 1 3 26 2 646 11 1 2 5]

KNN Model Performance

[12 1 3 0 1 8 760 0 0 0]

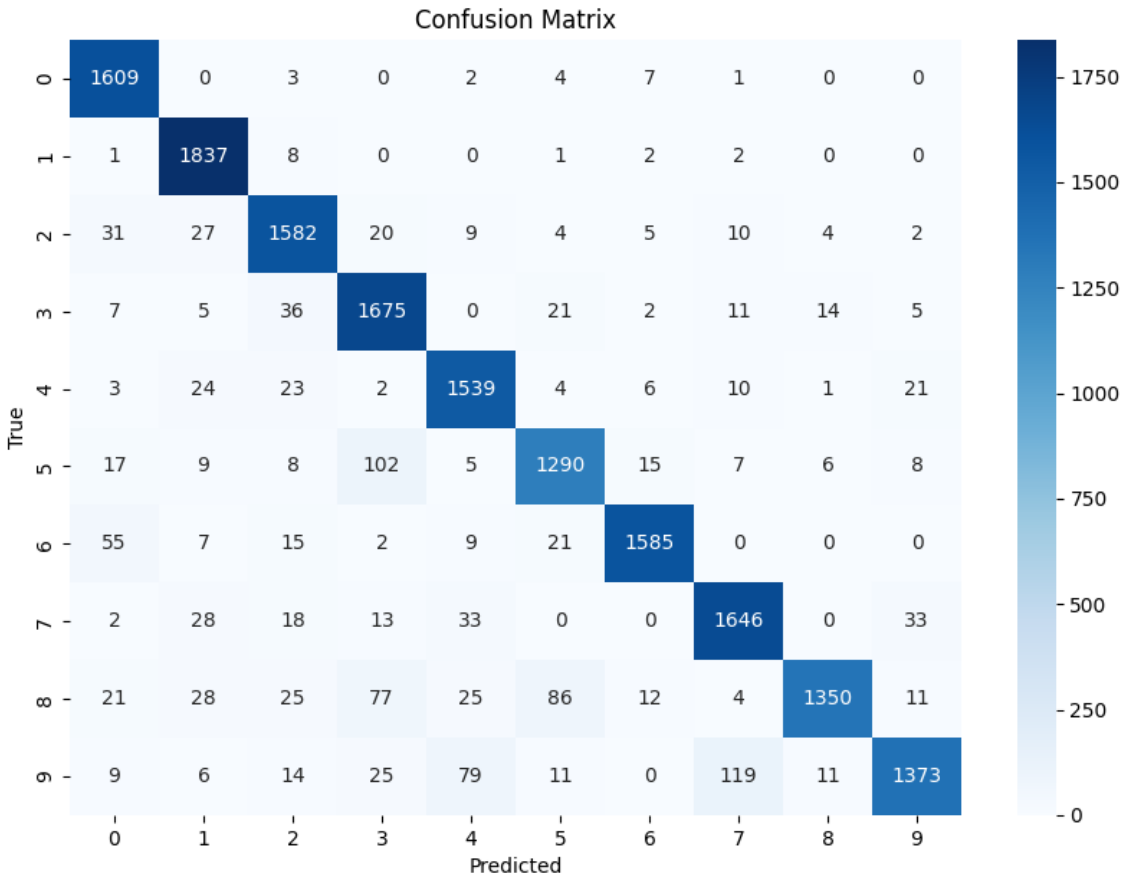
[2 17 5 6 11 0 0 824 0 28]

[6 14 7 19 12 34 5 2 731 5]

[6 3 3 13 10 1 0 27 4 771]]

KNN Model Performance

Train/Test Split: 80.0/19.999999999999996, K=5



Train/Test Split: 80.0/19.999999999999996, K=6

Accuracy: 93.79%

Confusion Matrix:

[[803 0 3 0 0 2 8 0 0 0]

[0 903 2 0 0 1 2 0 1 0]

[8 11 794 8 1 3 6 4 8 3]

[4 4 4 879 0 16 1 9 12 8]

[2 8 6 2 789 2 6 4 0 20]

[4 1 4 34 1 639 14 1 0 4]

KNN Model Performance

[12 1 3 0 2 9 758 0 0 0]

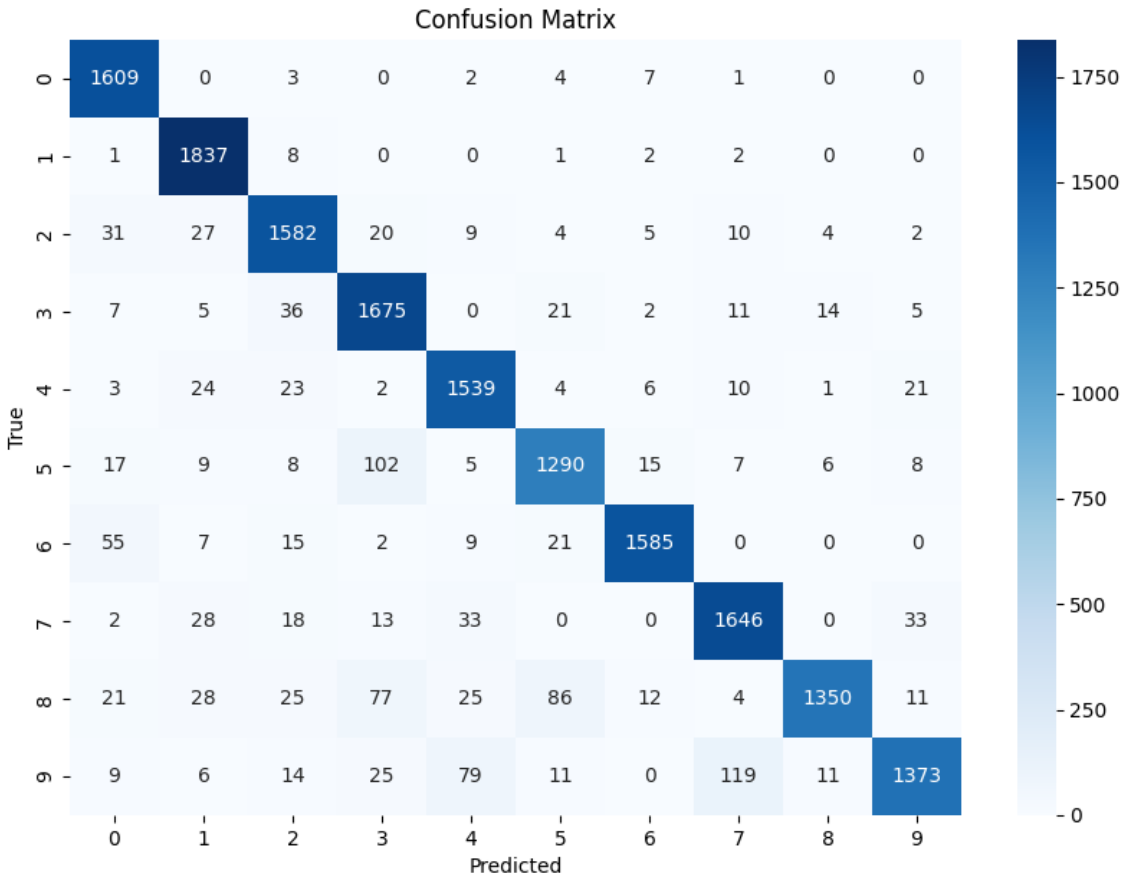
[2 19 3 6 11 0 0 826 0 26]

[8 16 6 17 14 35 4 2 727 6]

[7 3 3 11 17 1 0 31 5 760]]

KNN Model Performance

Train/Test Split: 80.0/19.999999999999996, K=6



Train/Test Split: 80.0/19.999999999999996, K=7

Accuracy: 93.90%

Confusion Matrix:

[[803 0 2 0 0 2 9 0 0 0]

[0 903 2 0 0 1 2 0 1 0]

[8 13 791 9 1 3 7 3 8 3]

[5 4 5 876 0 16 1 7 14 9]

[2 8 5 2 784 4 5 3 0 26]

[5 1 2 26 3 642 15 1 2 5]

KNN Model Performance

[11 1 1 0 1 9 762 0 0 0]

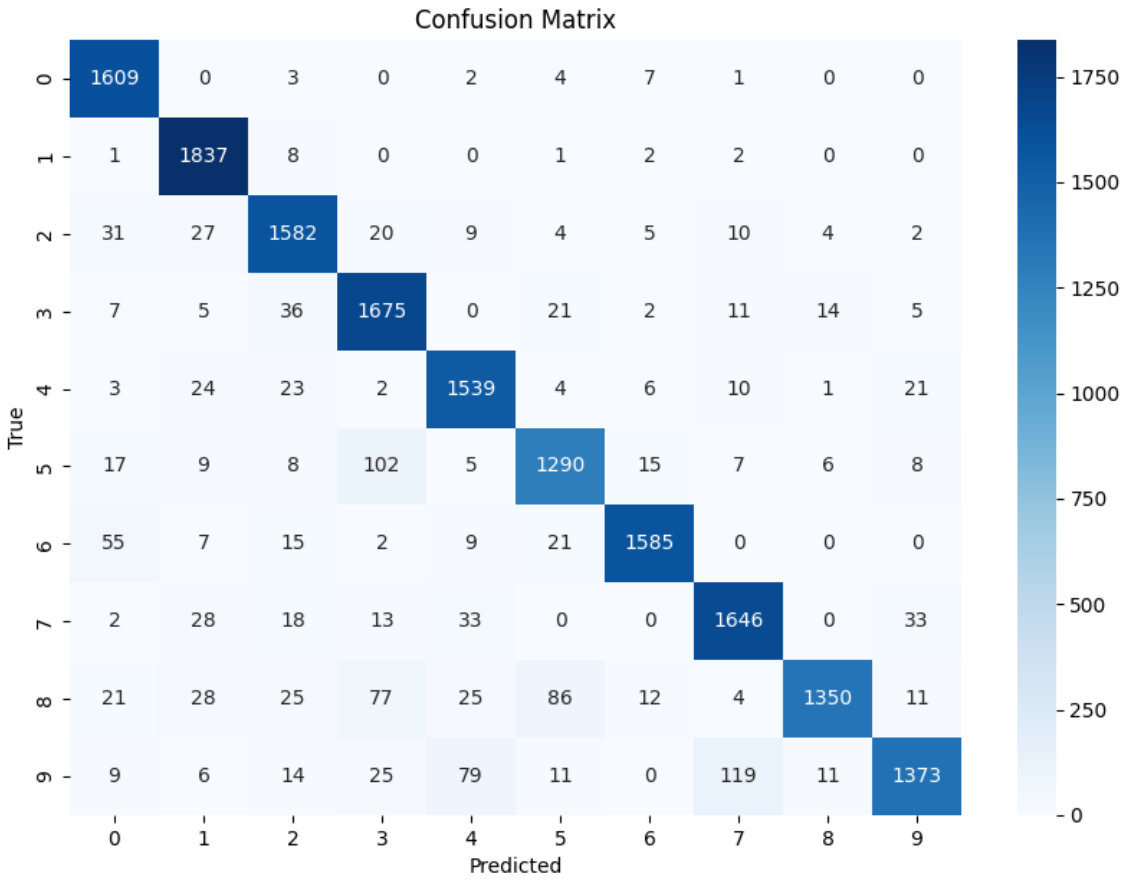
[2 18 4 5 11 0 0 821 0 32]

[7 15 4 17 13 31 4 2 737 5]

[7 3 2 11 14 0 0 27 5 769]]

KNN Model Performance

Train/Test Split: 80.0/19.999999999999996, K=7



Train/Test Split: 80.0/19.999999999999996, K=10

Accuracy: 93.44%

Confusion Matrix:

[[805 0 1 0 0 2 8 0 0 0]

[0 902 2 0 1 1 2 0 1 0]

[10 16 777 10 4 3 7 6 9 4]

[4 5 4 884 0 13 1 9 10 7]

[2 7 6 2 782 4 6 2 0 28]

[5 2 3 30 3 635 15 1 3 5]

KNN Model Performance

[14 1 1 0 3 7 758 0 1 0]

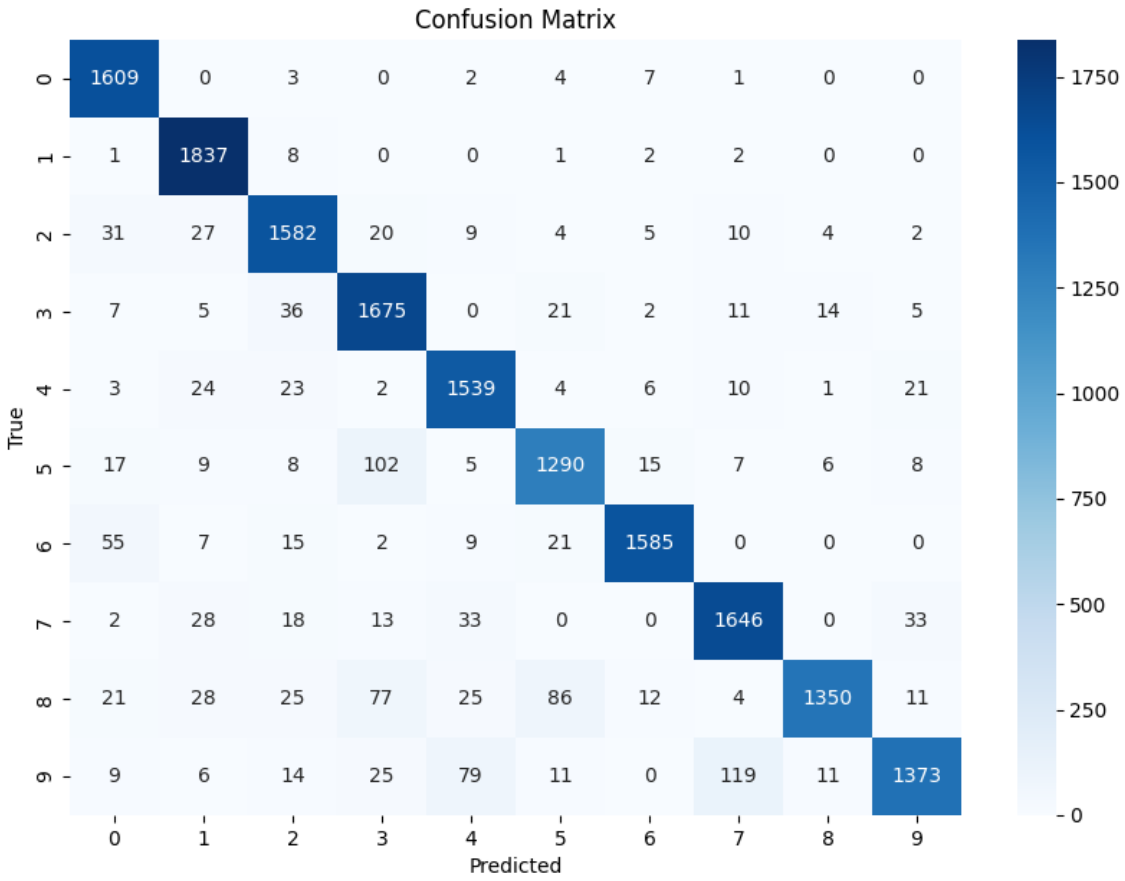
[1 21 2 6 11 0 0 818 0 34]

[7 19 4 17 11 35 5 2 730 5]

[6 3 3 13 15 0 0 37 3 758]]

KNN Model Performance

Train/Test Split: 80.0/19.999999999999996, K=10



Train/Test Split: 90.0/9.999999999999998, K=2

Accuracy: 93.26%

Confusion Matrix:

[[405 0 0 0 0 0 3 0 0 0]

[0 469 1 0 0 0 1 0 0 0]

[5 6 397 4 3 0 2 1 1 1]

[1 3 5 478 0 6 0 5 6 2]

[0 1 4 0 385 0 2 0 0 5]

[2 0 0 18 1 311 3 1 1 2]

KNN Model Performance

[16 0 1 1 0 3 381 0 0 0]

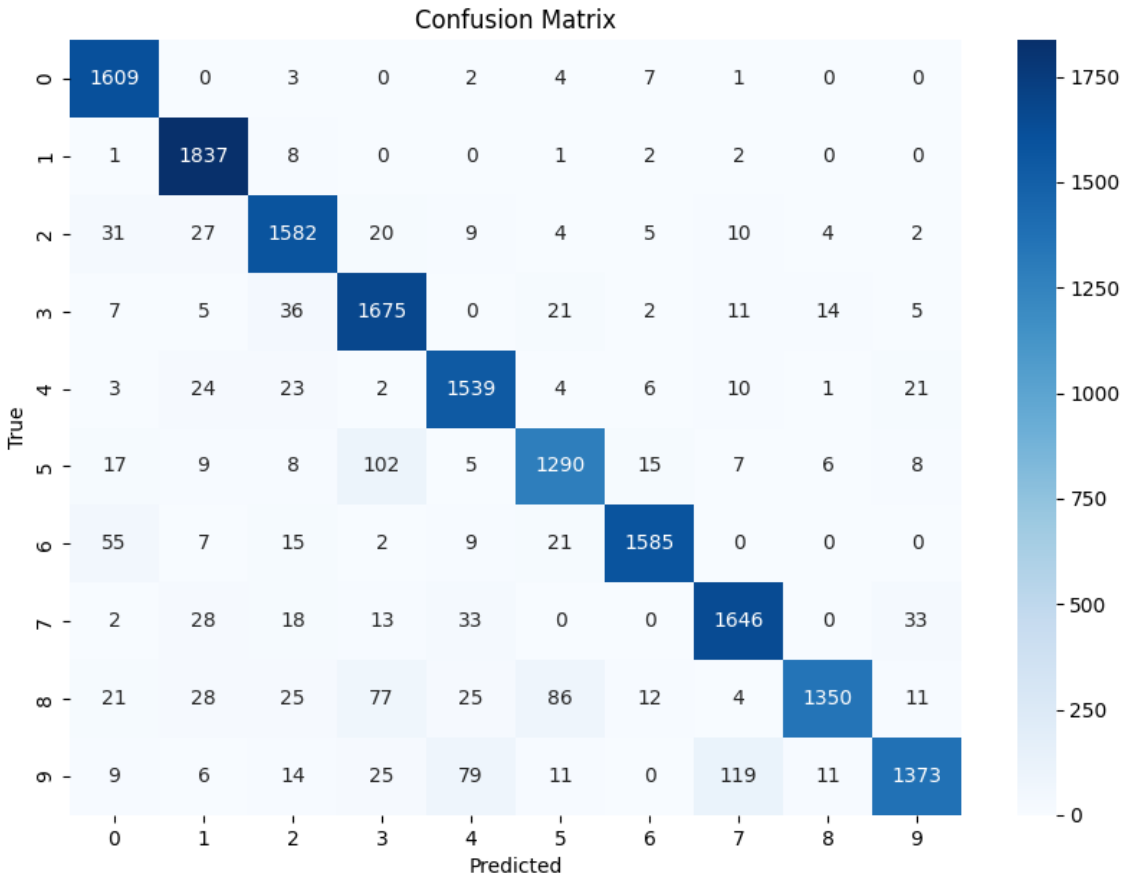
[1 11 3 3 5 1 0 408 0 6]

[3 7 6 16 7 29 4 2 327 2]

[4 0 1 10 15 2 0 26 2 356]]

KNN Model Performance

Train/Test Split: 90.0/9.999999999999998, K=2



Train/Test Split: 90.0/9.999999999999998, K=4

Accuracy: 94.19%

Confusion Matrix:

[[403 0 0 0 0 0 5 0 0 0]

[0 467 1 0 0 0 2 0 1 0]

[6 6 392 3 1 0 4 4 3 1]

[1 2 3 482 1 6 0 4 3 4]

[0 1 3 0 383 1 2 1 0 6]

[2 0 1 11 1 318 3 0 0 3]

KNN Model Performance

[11 0 1 0 0 4 386 0 0 0]

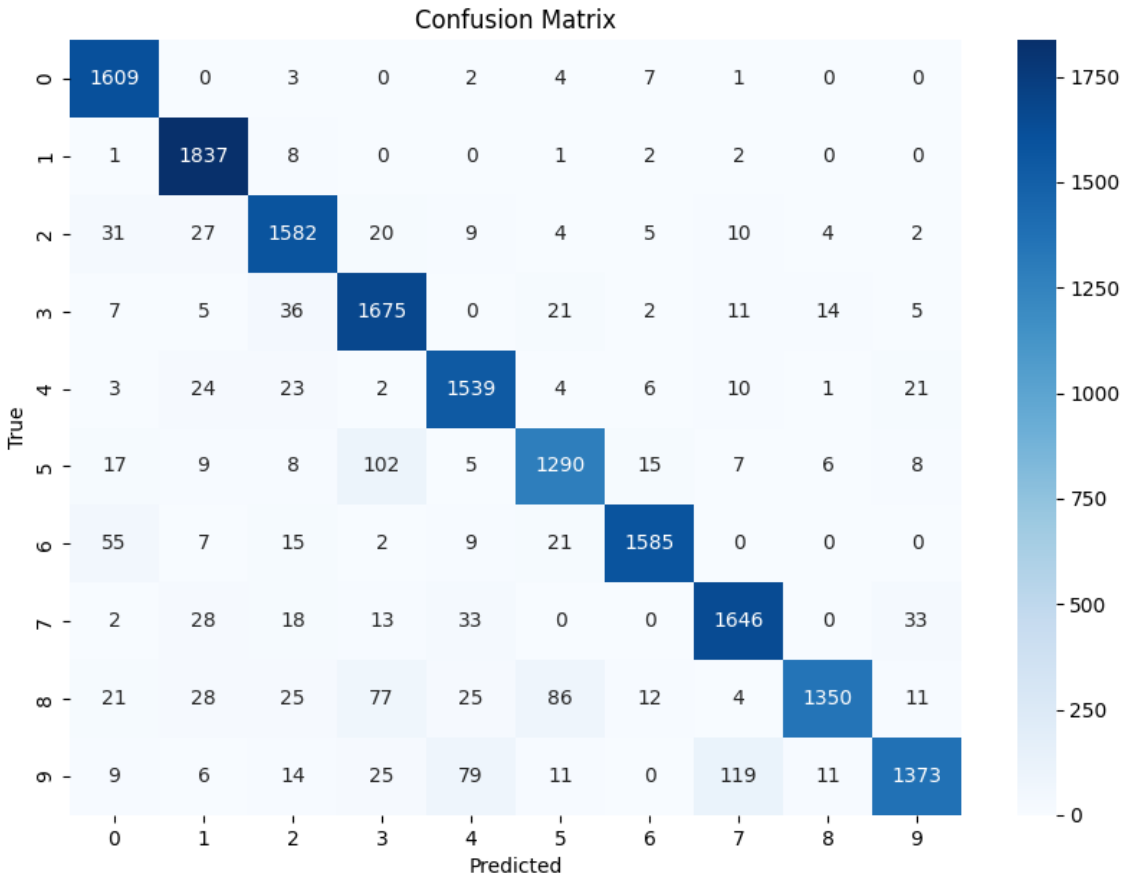
[1 11 3 2 4 0 0 406 0 11]

[2 9 6 10 7 20 2 1 343 3]

[4 1 0 7 6 1 0 17 4 376]]

KNN Model Performance

Train/Test Split: 90.0/9.999999999999998, K=4



Train/Test Split: 90.0/9.999999999999998, K=5

Accuracy: 94.12%

Confusion Matrix:

[[403 0 0 0 0 0 5 0 0 0]

[0 467 1 0 0 0 2 0 1 0]

[4 6 392 5 1 0 4 3 3 2]

[1 3 1 482 1 6 0 5 4 3]

[0 1 3 0 374 2 2 1 0 14]

[1 0 0 10 2 316 5 0 2 3]

KNN Model Performance

[9 0 1 0 0 4 388 0 0 0]

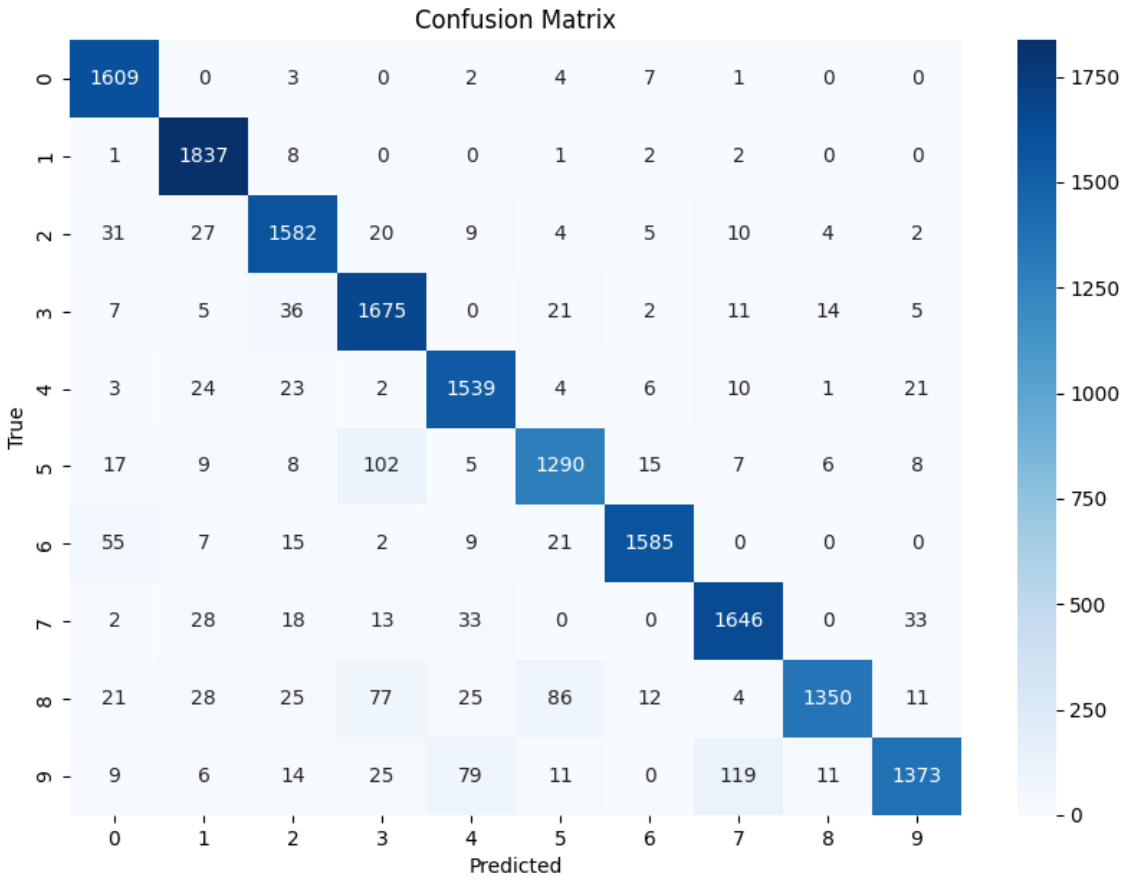
[2 11 3 3 4 0 0 401 0 14]

[2 7 4 10 5 20 3 1 349 2]

[5 1 0 8 4 1 0 13 3 381]]

KNN Model Performance

Train/Test Split: 90.0/9.999999999999998, K=5



Train/Test Split: 90.0/9.999999999999998, K=6

Accuracy: 94.12%

Confusion Matrix:

[[404 0 0 0 0 0 4 0 0 0]

[0 468 0 0 0 0 2 0 1 0]

[4 6 396 1 1 0 4 3 3 2]

[1 3 1 481 0 6 0 5 5 4]

[0 2 2 0 377 2 2 2 0 10]

[1 0 0 12 0 316 5 0 2 3]

KNN Model Performance

[12 0 0 0 0 4 386 0 0 0]

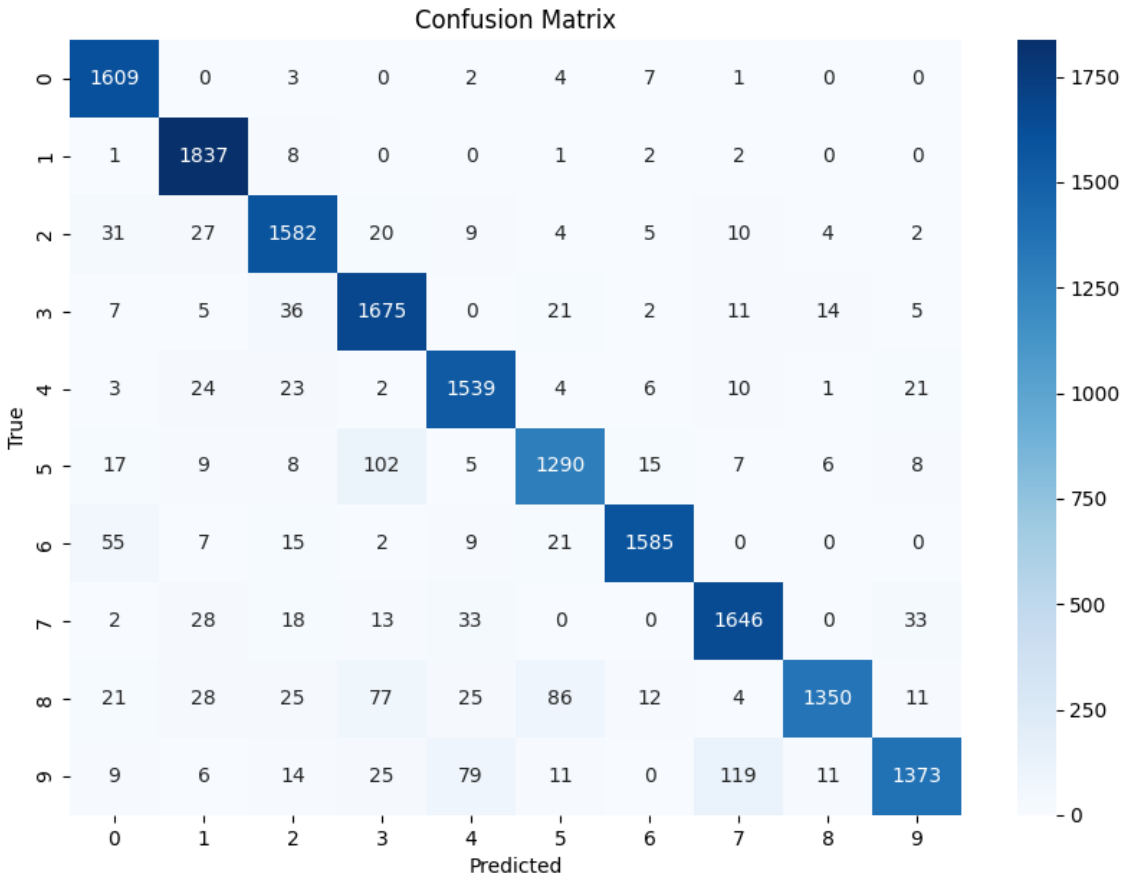
[2 11 3 3 6 0 0 402 0 11]

[2 9 5 10 6 22 3 1 344 1]

[6 1 0 7 5 0 0 15 3 379]]

KNN Model Performance

Train/Test Split: 90.0/9.999999999999998, K=6



Train/Test Split: 90.0/9.999999999999998, K=7

Accuracy: 94.31%

Confusion Matrix:

[[404 0 0 0 0 0 4 0 0 0]

[0 468 0 0 0 0 2 0 1 0]

[4 5 394 2 2 0 5 2 4 2]

[1 3 2 481 0 6 0 4 5 4]

[0 2 1 0 375 2 2 0 0 15]

[1 0 0 10 1 317 6 0 1 3]

KNN Model Performance

[11 0 0 0 0 4 387 0 0 0]

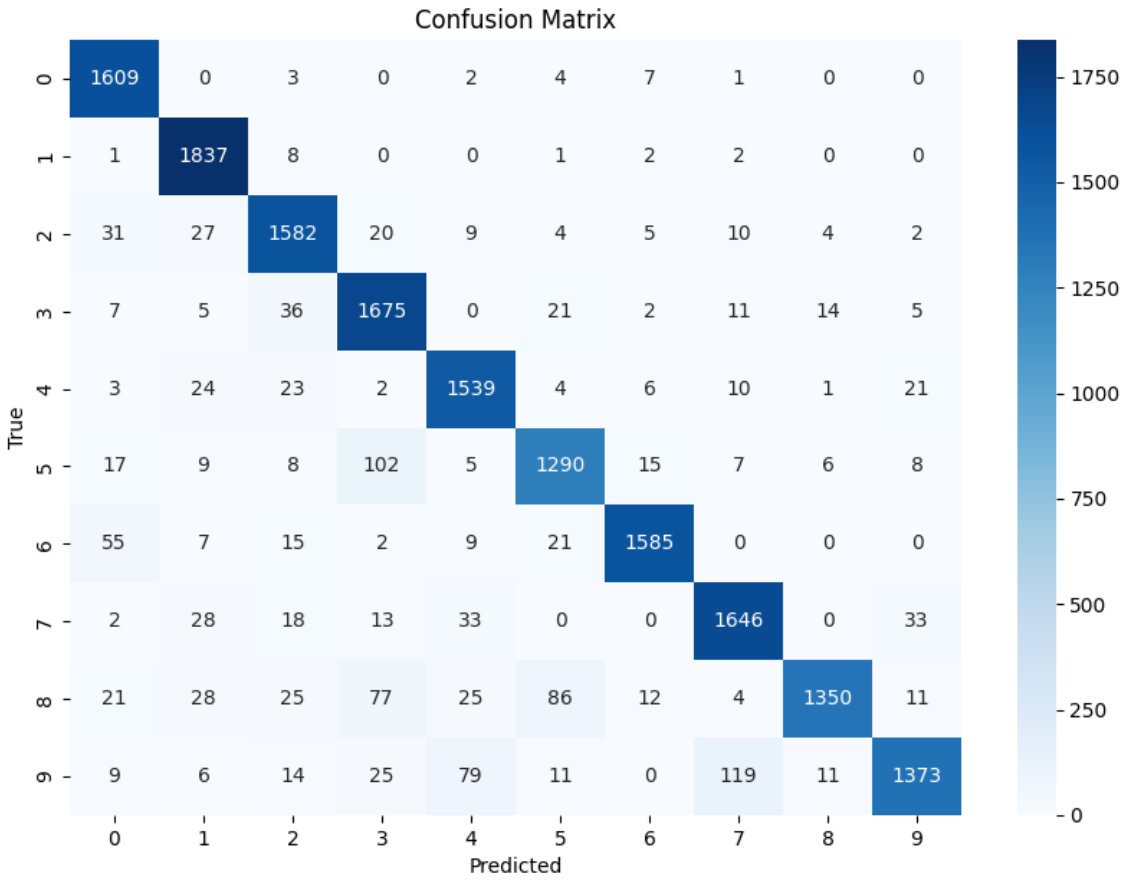
[2 11 2 3 5 0 0 401 0 14]

[2 7 4 10 6 16 3 1 352 2]

[6 1 0 7 5 0 0 12 3 382]]

KNN Model Performance

Train/Test Split: 90.0/9.999999999999998, K=7



Train/Test Split: 90.0/9.999999999999998, K=10

Accuracy: 93.36%

Confusion Matrix:

[[404 0 0 0 0 0 4 0 0 0]

[0 468 0 0 0 0 2 0 1 0]

[6 7 388 2 2 0 5 3 4 3]

[1 3 3 479 0 6 0 5 6 3]

[0 2 1 0 374 3 2 0 0 15]

[1 0 0 13 1 312 5 0 3 4]

KNN Model Performance

[11 0 0 0 2 3 385 0 1 0]

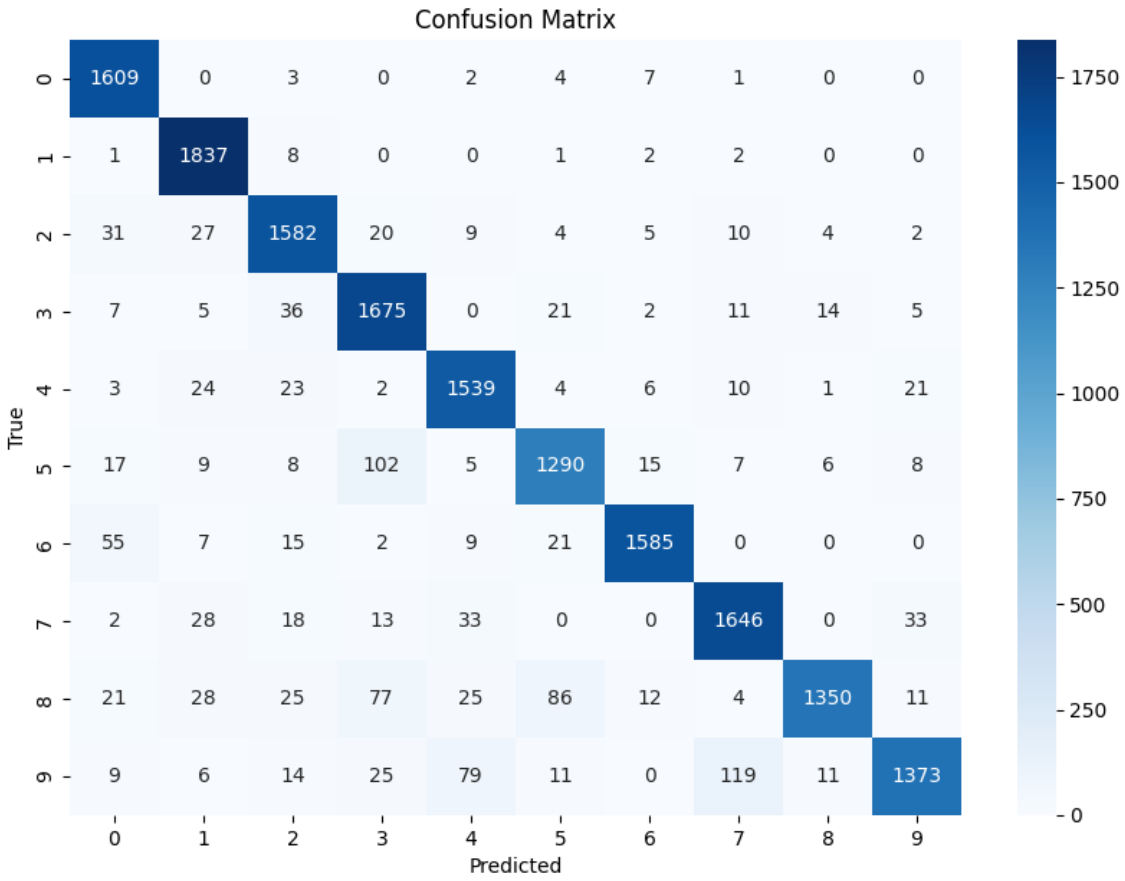
[1 13 1 4 7 0 0 396 0 16]

[2 11 3 12 7 21 5 1 340 1]

[5 1 1 8 6 0 0 18 2 375]]

KNN Model Performance

Train/Test Split: 90.0/9.999999999999998, K=10



Train/Test Split: 95.0/5.000000000000004, K=2

Accuracy: 93.76%

Confusion Matrix:

[[215 0 0 0 0 0 1 0 0 0]

[0 233 1 0 0 0 0 0 0 0]

[1 5 211 0 3 0 1 0 1 0]

[0 1 3 250 0 0 0 2 3 2]

[0 1 2 0 189 0 0 1 0 3]

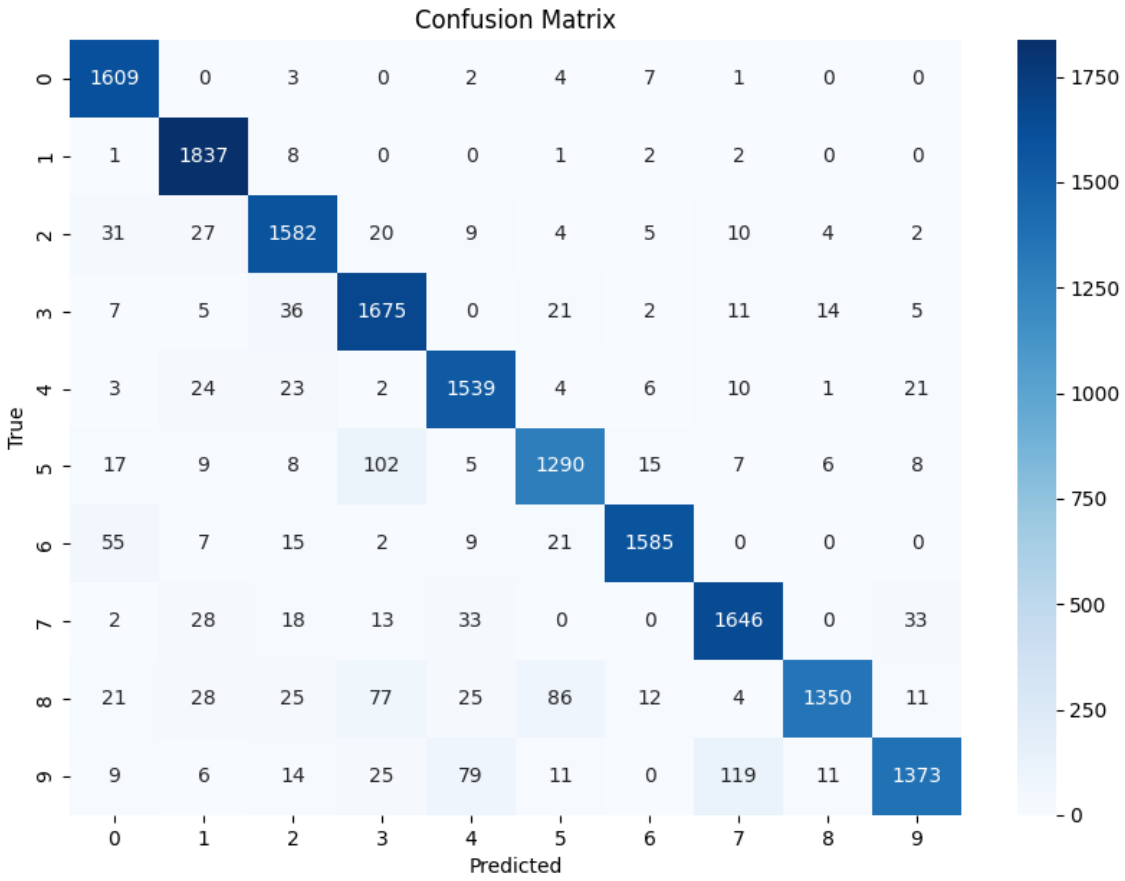
[0 0 0 9 0 147 1 1 0 2]

KNN Model Performance

```
[  7   0   0   0   0   2 190   0   0   0]

[  0   5   1   2   0   1   0 216   0   5]

[  1   5   4   8   4  12   3   0 154   0]

[  3   0   0   2  11   1   0  10   0 165]]
```

KNN Model Performance

Train/Test Split: 95.0/5.000000000000004, K=2



Train/Test Split: 95.0/5.000000000000004, K=4

Accuracy: 94.81%

Confusion Matrix:

[[213 0 0 0 0 0 3 0 0 0]

[0 232 1 0 0 0 0 0 1 0]

[1 5 210 0 1 0 2 0 2 1]

[0 1 2 250 1 1 0 2 2 2]

[0 1 1 0 192 0 0 0 0 2]

[0 0 0 7 0 149 1 0 0 3]

KNN Model Performance

[4 0 0 0 0 2 193 0 0 0]

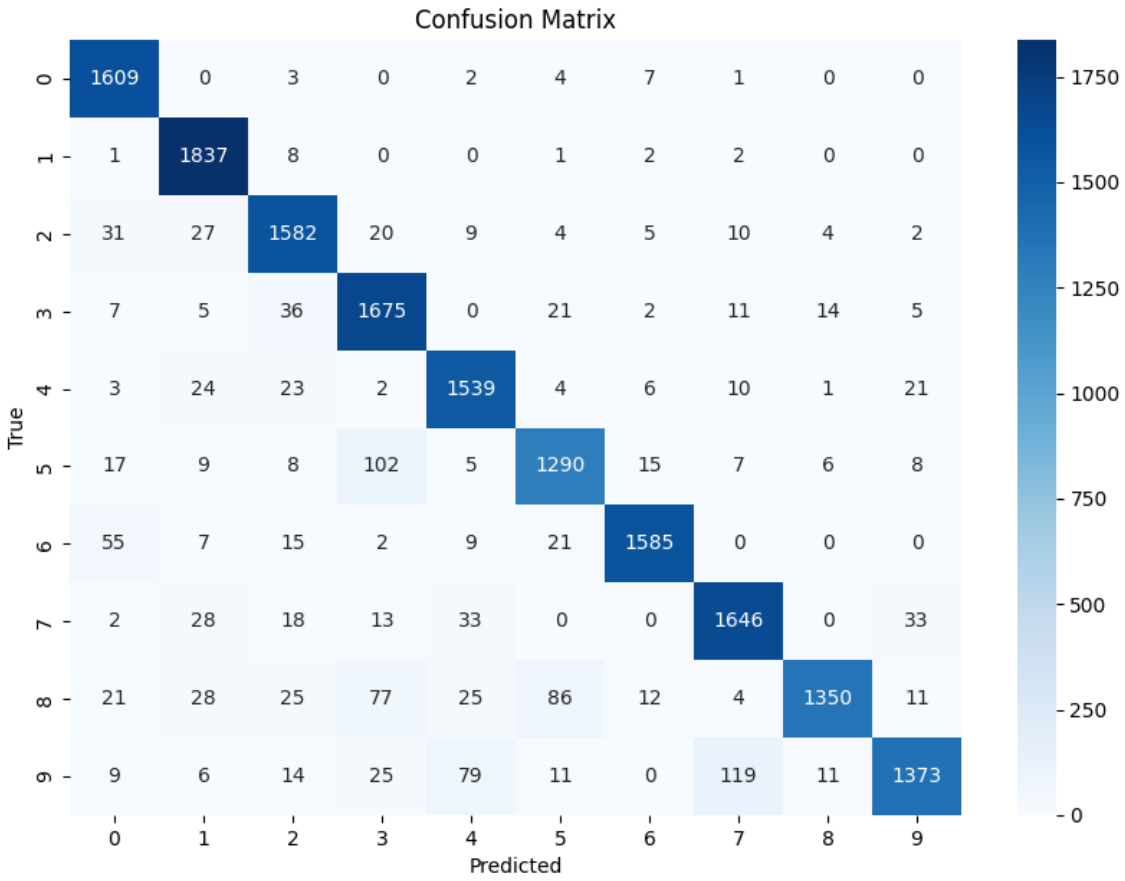
[0 5 1 2 1 0 0 214 0 7]

[1 3 3 4 2 9 2 0 166 1]

[3 1 0 2 6 1 0 6 0 173]]

KNN Model Performance

Train/Test Split: 95.0/5.000000000000004, K=4



Train/Test Split: 95.0/5.000000000000004, K=5

Accuracy: 94.72%

Confusion Matrix:

[[213 0 0 0 0 0 3 0 0 0]

[0 232 1 0 0 0 0 0 1 0]

[1 5 210 1 1 0 2 0 1 1]

[0 1 0 250 1 2 0 2 3 2]

[0 1 1 0 188 0 0 1 0 5]

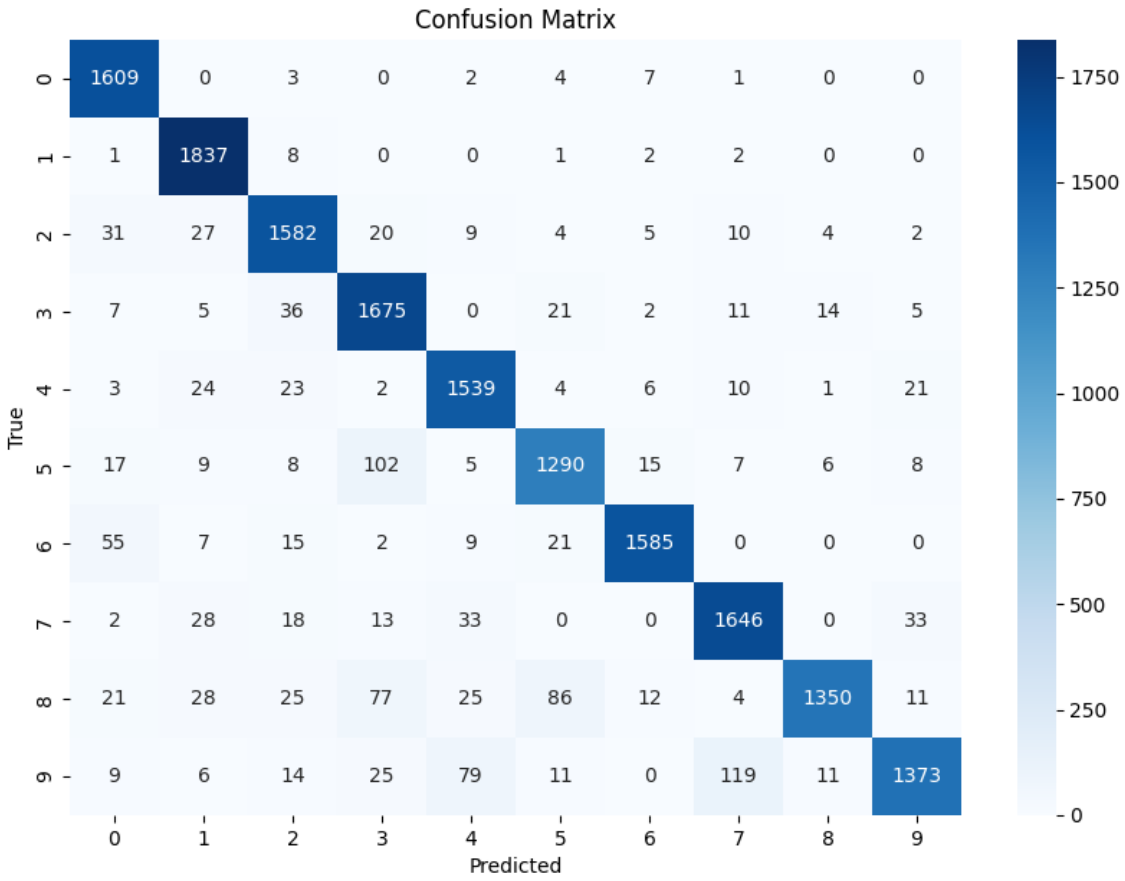
[0 0 0 5 1 150 1 0 0 3]

KNN Model Performance

```
[  5   0   0   0   0   2 192   0   0   0]

[  0   5   1   3   1   0   0 211   0   9]

[  1   3   3   4   2   7   2   0 169   0]

[  3   1   0   3   4   1   0   5   0 175]]
```

KNN Model Performance

Train/Test Split: 95.0/5.000000000000004, K=5



Train/Test Split: 95.0/5.000000000000004, K=6

Accuracy: 94.86%

Confusion Matrix:

[[214 0 0 0 0 0 2 0 0 0]

[0 233 0 0 0 0 0 0 1 0]

[1 5 211 0 1 0 2 0 1 1]

[0 1 0 251 0 2 0 2 3 2]

[0 1 1 0 186 1 0 1 0 6]

[0 0 0 5 0 150 1 0 1 3]

KNN Model Performance

[5 0 0 0 0 3 191 0 0 0]

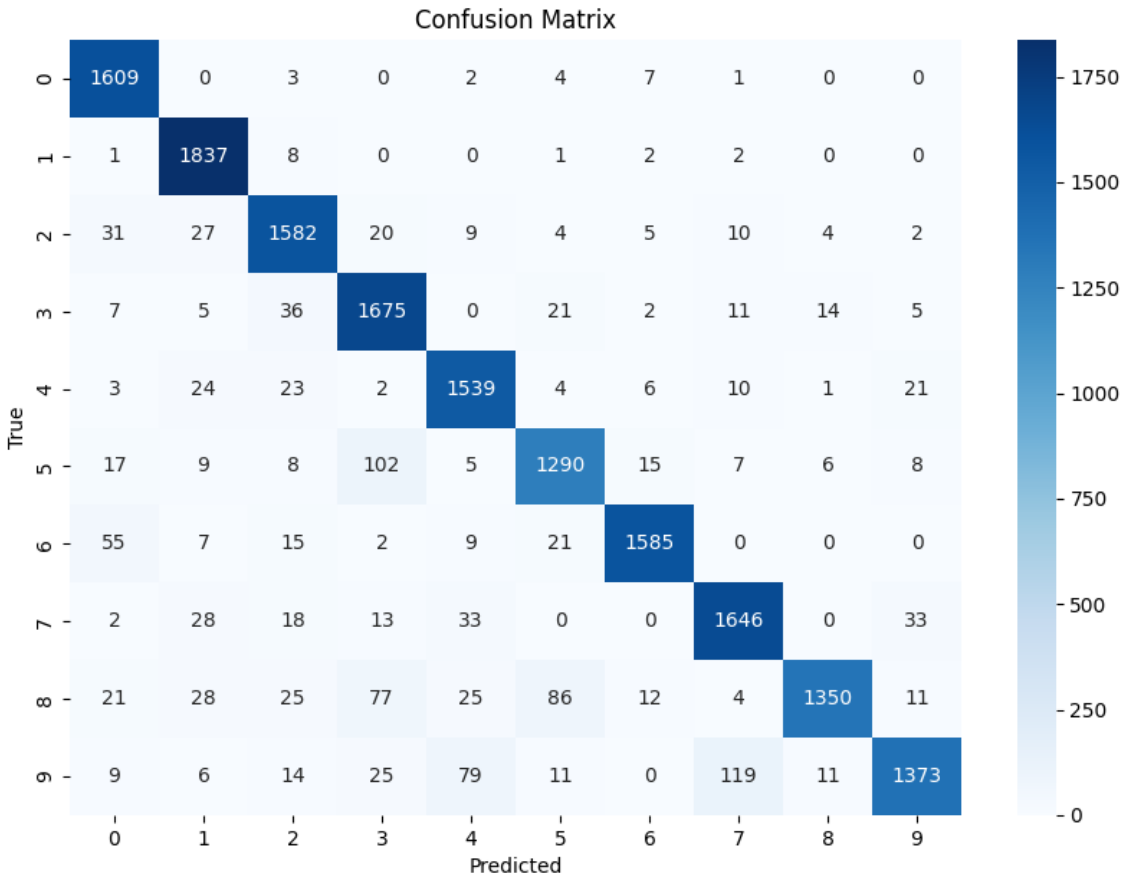
[0 5 1 3 1 0 0 214 0 6]

[1 3 2 3 2 9 2 0 168 1]

[4 1 0 3 3 0 0 6 0 175]]

KNN Model Performance

Train/Test Split: 95.0/5.000000000000004, K=6



Train/Test Split: 95.0/5.000000000000004, K=7

Accuracy: 95.05%

Confusion Matrix:

[[214 0 0 0 0 0 2 0 0 0]

[0 233 0 0 0 0 0 0 1 0]

[1 5 210 0 1 0 3 0 1 1]

[0 1 0 251 0 1 0 2 3 3]

[0 1 0 0 187 1 0 0 0 7]

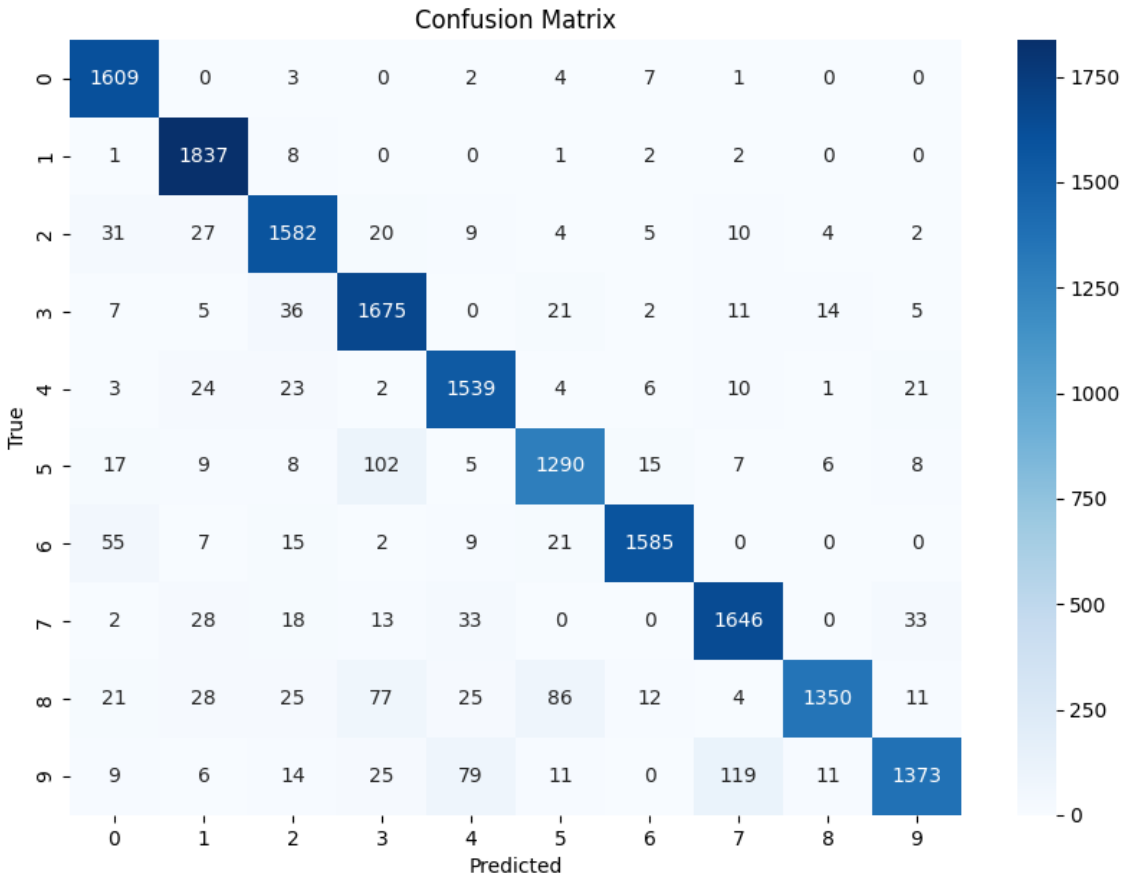
[0 0 0 4 0 152 1 0 0 3]

KNN Model Performance

```
[  5   0   0   0   0   2 192   0   0   0]

[  0   5   1   2   1   0   0 212   0   9]

[  1   3   2   3   2   8   2   0 170   0]

[  4   1   0   3   3   0   0   5   0 176]]
```

KNN Model Performance

Train/Test Split: 95.0/5.000000000000004, K=7



Train/Test Split: 95.0/5.000000000000004, K=10

Accuracy: 94.29%

Confusion Matrix:

[[214 0 0 0 0 0 2 0 0 0]

[0 233 0 0 0 0 0 0 1 0]

[1 5 206 0 2 0 3 1 2 2]

[0 1 1 249 0 2 0 2 3 3]

[0 1 0 0 188 2 0 0 0 5]

[0 0 0 5 0 149 1 0 1 4]

KNN Model Performance

```
[  3   0   0   0   1   2 193   0   0   0]

[  0   6   0   2   1   0   0 211   0  10]

[  1   4   1   3   3  12   2   0 165   0]

[  3   1   0   4   3   0   0   8   0 173]]
```

KNN Model Performance

Train/Test Split: 95.0/5.000000000000004, K=10