

Epoch 1/10 - Train Loss: 0.4603, Train Acc: 0.8298, Val Loss: 0.4745, Val Acc: 0.8282, Val Macro-F1: 0.8280

Epoch 2/10 - Train Loss: 0.3933, Train Acc: 0.8554, Val Loss: 0.4138, Val Acc: 0.8512, Val Macro-F1: 0.8514

Epoch 3/10 - Train Loss: 0.3673, Train Acc: 0.8634, Val Loss: 0.3953, Val Acc: 0.8585, Val Macro-F1: 0.8587

Epoch 4/10 - Train Loss: 0.3400, Train Acc: 0.8739, Val Loss: 0.3737, Val Acc: 0.8663, Val Macro-F1: 0.8666

Epoch 5/10 - Train Loss: 0.3239, Train Acc: 0.8802, Val Loss: 0.3650, Val Acc: 0.8680, Val Macro-F1: 0.8681

Epoch 6/10 - Train Loss: 0.3138, Train Acc: 0.8834, Val Loss: 0.3591, Val Acc: 0.8705, Val Macro-F1: 0.8707

Epoch 7/10 - Train Loss: 0.3027, Train Acc: 0.8882, Val Loss: 0.3512, Val Acc: 0.8720, Val Macro-F1: 0.8722

Epoch 8/10 - Train Loss: 0.2887, Train Acc: 0.8931, Val Loss: 0.3439, Val Acc: 0.8742, Val Macro-F1: 0.8744

Epoch 9/10 - Train Loss: 0.2828, Train Acc: 0.8950, Val Loss: 0.3398, Val Acc: 0.8777, Val Macro-F1: 0.8779

Epoch 10/10 - Train Loss: 0.2788, Train Acc: 0.8964, Val Loss: 0.3418, Val Acc: 0.8767, Val Macro-F1: 0.8769

Epoch 1/10 - Train Loss: 0.4309, Train Acc: 0.8381, Val Loss: 0.4477, Val Acc: 0.8353, Val Macro-F1: 0.8358

Epoch 2/10 - Train Loss: 0.3880, Train Acc: 0.8568, Val Loss: 0.4166, Val Acc: 0.8507, Val Macro-F1: 0.8506

Epoch 3/10 - Train Loss: 0.3565, Train Acc: 0.8686, Val Loss: 0.3931, Val Acc: 0.8578, Val Macro-F1: 0.8578

Epoch 4/10 - Train Loss: 0.3381, Train Acc: 0.8750, Val Loss: 0.3808, Val Acc: 0.8617, Val Macro-F1: 0.8620

Epoch 5/10 - Train Loss: 0.3196, Train Acc: 0.8810, Val Loss: 0.3662, Val Acc: 0.8685, Val Macro-F1: 0.8691

Epoch 6/10 - Train Loss: 0.3037, Train Acc: 0.8881, Val Loss: 0.3562, Val Acc: 0.8705, Val Macro-F1: 0.8708

Epoch 7/10 - Train Loss: 0.2960, Train Acc: 0.8897, Val Loss: 0.3543, Val Acc: 0.8738, Val Macro-F1: 0.8742

Epoch 8/10 - Train Loss: 0.2932, Train Acc: 0.8907, Val Loss: 0.3535, Val Acc: 0.8752, Val Macro-F1: 0.8755

Epoch 9/10 - Train Loss: 0.2785, Train Acc: 0.8958, Val Loss: 0.3443, Val Acc: 0.8778, Val Macro-F1: 0.8784

Epoch 10/10 - Train Loss: 0.2792, Train Acc: 0.8957, Val Loss: 0.3529, Val Acc: 0.8733, Val Macro-F1: 0.8736

Epoch 1/10 - Train Loss: 0.5096, Train Acc: 0.8038, Val Loss: 0.5178, Val Acc: 0.7993, Val Macro-F1: 0.7982

Epoch 2/10 - Train Loss: 0.4052, Train Acc: 0.8508, Val Loss: 0.4253, Val Acc: 0.8490, Val Macro-F1: 0.8489

Epoch 3/10 - Train Loss: 0.3676, Train Acc: 0.8651, Val Loss: 0.3944, Val Acc: 0.8633, Val Macro-F1: 0.8633

Epoch 4/10 - Train Loss: 0.3435, Train Acc: 0.8724, Val Loss: 0.3775, Val Acc: 0.8648, Val Macro-F1: 0.8650

Epoch 5/10 - Train Loss: 0.3304, Train Acc: 0.8769, Val Loss: 0.3701, Val Acc: 0.8662, Val Macro-F1: 0.8664

Epoch 6/10 - Train Loss: 0.3162, Train Acc: 0.8816, Val Loss: 0.3620, Val Acc: 0.8713, Val Macro-F1: 0.8715

Epoch 7/10 - Train Loss: 0.3030, Train Acc: 0.8869, Val Loss: 0.3552, Val Acc: 0.8735, Val Macro-F1: 0.8738

Epoch 8/10 - Train Loss: 0.2878, Train Acc: 0.8916, Val Loss: 0.3471, Val Acc: 0.8758, Val Macro-F1: 0.8761

Epoch 9/10 - Train Loss: 0.2822, Train Acc: 0.8939, Val Loss: 0.3489, Val Acc: 0.8730, Val Macro-F1: 0.8733

Epoch 10/10 - Train Loss: 0.2760, Train Acc: 0.8966, Val Loss: 0.3464, Val Acc: 0.8760, Val Macro-F1: 0.8765

Epoch 1/10 - Train Loss: 0.2442, Train Acc: 0.9090, Val Loss: 0.3112, Val Acc: 0.8878, Val Macro-F1: 0.8880

Epoch 2/10 - Train Loss: 0.2400, Train Acc: 0.9110, Val Loss: 0.3091, Val Acc: 0.8900, Val Macro-F1: 0.8901

Epoch 3/10 - Train Loss: 0.2373, Train Acc: 0.9116, Val Loss: 0.3086, Val Acc: 0.8900, Val Macro-F1: 0.8900

Epoch 4/10 - Train Loss: 0.2340, Train Acc: 0.9128, Val Loss: 0.3076, Val Acc: 0.8912, Val Macro-F1: 0.8912

Epoch 5/10 - Train Loss: 0.2311, Train Acc: 0.9137, Val Loss: 0.3073, Val Acc: 0.8925, Val Macro-F1: 0.8926

Epoch 6/10 - Train Loss: 0.2286, Train Acc: 0.9150, Val Loss: 0.3075, Val Acc: 0.8918, Val Macro-F1: 0.8919

Epoch 7/10 - Train Loss: 0.2259, Train Acc: 0.9156, Val Loss: 0.3072, Val Acc: 0.8918, Val Macro-F1: 0.8919

Epoch 8/10 - Train Loss: 0.2237, Train Acc: 0.9167, Val Loss: 0.3068, Val Acc: 0.8910, Val Macro-F1: 0.8910

Epoch 9/10 - Train Loss: 0.2219, Train Acc: 0.9174, Val Loss: 0.3074, Val Acc: 0.8905, Val Macro-F1: 0.8905

Epoch 10/10 - Train Loss: 0.2196, Train Acc: 0.9180, Val Loss: 0.3074, Val Acc: 0.8908, Val Macro-F1: 0.8909

Epoch 1/10 - Train Loss: 0.2247, Train Acc: 0.9169, Val Loss: 0.3050, Val Acc: 0.8912, Val Macro-F1: 0.8910

Epoch 2/10 - Train Loss: 0.2192, Train Acc: 0.9192, Val Loss: 0.3033, Val Acc: 0.8917, Val Macro-F1: 0.8916

Epoch 3/10 - Train Loss: 0.2153, Train Acc: 0.9202, Val Loss: 0.3029, Val Acc: 0.8915, Val Macro-F1: 0.8915

Epoch 4/10 - Train Loss: 0.2118, Train Acc: 0.9215, Val Loss: 0.3040, Val Acc: 0.8918, Val Macro-F1: 0.8918

Epoch 5/10 - Train Loss: 0.2089, Train Acc: 0.9225, Val Loss: 0.3047, Val Acc: 0.8928, Val Macro-F1: 0.8929

Epoch 6/10 - Train Loss: 0.2059, Train Acc: 0.9235, Val Loss: 0.3054, Val Acc: 0.8933, Val Macro-F1: 0.8934

Epoch 7/10 - Train Loss: 0.2033, Train Acc: 0.9241, Val Loss: 0.3075, Val Acc: 0.8940, Val Macro-F1: 0.8941

Epoch 8/10 - Train Loss: 0.2005, Train Acc: 0.9248, Val Loss: 0.3085, Val Acc: 0.8938, Val Macro-F1: 0.8939

Epoch 9/10 - Train Loss: 0.1981, Train Acc: 0.9259, Val Loss: 0.3101, Val Acc: 0.8947, Val Macro-F1: 0.8947

Epoch 10/10 - Train Loss: 0.1959, Train Acc: 0.9269, Val Loss: 0.3112, Val Acc: 0.8940, Val Macro-F1: 0.8940

Epoch 1/10 - Train Loss: 0.2263, Train Acc: 0.9152, Val Loss: 0.3045, Val Acc: 0.8942, Val Macro-F1: 0.8939

Epoch 2/10 - Train Loss: 0.2211, Train Acc: 0.9168, Val Loss: 0.3034, Val Acc: 0.8947, Val Macro-F1: 0.8945

Epoch 3/10 - Train Loss: 0.2167, Train Acc: 0.9185, Val Loss: 0.3027, Val Acc: 0.8947, Val Macro-F1: 0.8946

Epoch 4/10 - Train Loss: 0.2130, Train Acc: 0.9195, Val Loss: 0.3026, Val Acc: 0.8967, Val Macro-F1: 0.8966

Epoch 5/10 - Train Loss: 0.2095, Train Acc: 0.9214, Val Loss: 0.3024, Val Acc: 0.8975, Val Macro-F1: 0.8974

Epoch 6/10 - Train Loss: 0.2060, Train Acc: 0.9226, Val Loss: 0.3031, Val Acc: 0.8973, Val Macro-F1: 0.8973

Epoch 7/10 - Train Loss: 0.2028, Train Acc: 0.9241, Val Loss: 0.3032, Val Acc: 0.8980, Val Macro-F1: 0.8980

Epoch 8/10 - Train Loss: 0.1995, Train Acc: 0.9254, Val Loss: 0.3034, Val Acc: 0.8982, Val Macro-F1: 0.8982

Epoch 9/10 - Train Loss: 0.1961, Train Acc: 0.9266, Val Loss: 0.3041, Val Acc: 0.8982, Val Macro-F1: 0.8982

Epoch 10/10 - Train Loss: 0.1930, Train Acc: 0.9279, Val Loss: 0.3050, Val Acc: 0.8967, Val Macro-F1: 0.8966

Epoch 1/10 - Train Loss: 0.2125, Train Acc: 0.9208, Val Loss: 0.3018, Val Acc: 0.8933, Val Macro-F1: 0.8934

Epoch 2/10 - Train Loss: 0.2112, Train Acc: 0.9212, Val Loss: 0.3015, Val Acc: 0.8937, Val Macro-F1: 0.8937

Epoch 3/10 - Train Loss: 0.2098, Train Acc: 0.9216, Val Loss: 0.3017, Val Acc: 0.8938, Val Macro-F1: 0.8939

Epoch 4/10 - Train Loss: 0.2087, Train Acc: 0.9220, Val Loss: 0.3017, Val Acc: 0.8948, Val Macro-F1: 0.8949

Epoch 5/10 - Train Loss: 0.2073, Train Acc: 0.9226, Val Loss: 0.3019, Val Acc: 0.8950, Val Macro-F1: 0.8951

Epoch 6/10 - Train Loss: 0.2061, Train Acc: 0.9230, Val Loss: 0.3020, Val Acc: 0.8957, Val Macro-F1: 0.8958

Epoch 7/10 - Train Loss: 0.2049, Train Acc: 0.9233, Val Loss: 0.3022, Val Acc: 0.8955, Val Macro-F1: 0.8956

Epoch 8/10 - Train Loss: 0.2037, Train Acc: 0.9238, Val Loss: 0.3025, Val Acc: 0.8947, Val Macro-F1: 0.8948

Epoch 9/10 - Train Loss: 0.2026, Train Acc: 0.9242, Val Loss: 0.3028, Val Acc: 0.8950, Val Macro-F1: 0.8951

Epoch 10/10 - Train Loss: 0.2014, Train Acc: 0.9248, Val Loss: 0.3033, Val Acc: 0.8942, Val Macro-F1: 0.8943

Epoch 1/10 - Train Loss: 0.1860, Train Acc: 0.9309, Val Loss: 0.3057, Val Acc: 0.8958, Val Macro-F1: 0.8959

Epoch 2/10 - Train Loss: 0.1842, Train Acc: 0.9316, Val Loss: 0.3060, Val Acc: 0.8958, Val Macro-F1: 0.8959

Epoch 3/10 - Train Loss: 0.1826, Train Acc: 0.9325, Val Loss: 0.3067, Val Acc: 0.8955, Val Macro-F1: 0.8956

Epoch 4/10 - Train Loss: 0.1811, Train Acc: 0.9327, Val Loss: 0.3077, Val Acc: 0.8950, Val Macro-F1: 0.8952

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Epoch 6/10 - Train Loss: 0.1780, Train Acc: 0.9337, Val Loss: 0.3093, Val Acc: 0.8957, Val Macro-F1: 0.8958

Epoch 7/10 - Train Loss: 0.1764, Train Acc: 0.9345, Val Loss: 0.3100, Val Acc: 0.8943, Val Macro-F1: 0.8945

Epoch 8/10 - Train Loss: 0.1750, Train Acc: 0.9348, Val Loss: 0.3109, Val Acc: 0.8945, Val Macro-F1: 0.8946

Epoch 9/10 - Train Loss: 0.1738, Train Acc: 0.9352, Val Loss: 0.3117, Val Acc: 0.8943, Val Macro-F1: 0.8944

Epoch 10/10 - Train Loss: 0.1725, Train Acc: 0.9357, Val Loss: 0.3125, Val Acc: 0.8940, Val Macro-F1: 0.8941

Epoch 1/10 - Train Loss: 0.1865, Train Acc: 0.9305, Val Loss: 0.3011, Val Acc: 0.9007, Val Macro-F1: 0.9006

Epoch 2/10 - Train Loss: 0.1846, Train Acc: 0.9316, Val Loss: 0.3012, Val Acc: 0.9008, Val Macro-F1: 0.9008

Epoch 3/10 - Train Loss: 0.1828, Train Acc: 0.9321, Val Loss: 0.3016, Val Acc: 0.9012, Val Macro-F1: 0.9011

Epoch 4/10 - Train Loss: 0.1811, Train Acc: 0.9325, Val Loss: 0.3021, Val Acc: 0.9008, Val Macro-F1: 0.9008

Epoch 5/10 - Train Loss: 0.1794, Train Acc: 0.9333, Val Loss: 0.3028, Val Acc: 0.9005, Val Macro-F1: 0.9005

Epoch 6/10 - Train Loss: 0.1776, Train Acc: 0.9341, Val Loss: 0.3033, Val Acc: 0.9005, Val Macro-F1: 0.9005

Epoch 7/10 - Train Loss: 0.1759, Train Acc: 0.9346, Val Loss: 0.3039, Val Acc: 0.9000, Val Macro-F1: 0.9000

Epoch 8/10 - Train Loss: 0.1743, Train Acc: 0.9351, Val Loss: 0.3047, Val Acc: 0.9000, Val Macro-F1: 0.9000

Epoch 9/10 - Train Loss: 0.1725, Train Acc: 0.9358, Val Loss: 0.3055, Val Acc: 0.9000, Val Macro-F1: 0.9000

Epoch 10/10 - Train Loss: 0.1709, Train Acc: 0.9364, Val Loss: 0.3061, Val Acc: 0.9002, Val Macro-F1: 0.9002

Epoch 1/10 - Train Loss: 0.1991, Train Acc: 0.9259, Val Loss: 0.3020, Val Acc: 0.8948, Val Macro-F1: 0.8951

Epoch 2/10 - Train Loss: 0.1987, Train Acc: 0.9260, Val Loss: 0.3020, Val Acc: 0.8945, Val Macro-F1: 0.8947

Epoch 3/10 - Train Loss: 0.1983, Train Acc: 0.9262, Val Loss: 0.3021, Val Acc: 0.8940, Val Macro-F1: 0.8942

Epoch 4/10 - Train Loss: 0.1980, Train Acc: 0.9263, Val Loss: 0.3022, Val Acc: 0.8942, Val Macro-F1: 0.8944

Epoch 5/10 - Train Loss: 0.1977, Train Acc: 0.9264, Val Loss: 0.3022, Val Acc: 0.8943, Val Macro-F1: 0.8946

Epoch 6/10 - Train Loss: 0.1975, Train Acc: 0.9264, Val Loss: 0.3022, Val Acc: 0.8947, Val Macro-F1: 0.8949

Epoch 7/10 - Train Loss: 0.1972, Train Acc: 0.9265, Val Loss: 0.3023, Val Acc: 0.8948, Val Macro-F1: 0.8951

Epoch 8/10 - Train Loss: 0.1969, Train Acc: 0.9266, Val Loss: 0.3023, Val Acc: 0.8945, Val Macro-F1: 0.8948

Epoch 9/10 - Train Loss: 0.1966, Train Acc: 0.9267, Val Loss: 0.3024, Val Acc: 0.8945, Val Macro-F1: 0.8948

Epoch 10/10 - Train Loss: 0.1964, Train Acc: 0.9269, Val Loss: 0.3025, Val Acc: 0.8942, Val Macro-F1: 0.8944

Epoch 1/10 - Train Loss: 0.1671, Train Acc: 0.9380, Val Loss: 0.3097, Val Acc: 0.8973, Val Macro-F1: 0.8975

Epoch 2/10 - Train Loss: 0.1666, Train Acc: 0.9384, Val Loss: 0.3098, Val Acc: 0.8975, Val Macro-F1: 0.8976

Epoch 3/10 - Train Loss: 0.1662, Train Acc: 0.9385, Val Loss: 0.3099, Val Acc: 0.8977, Val Macro-F1: 0.8978

Epoch 4/10 - Train Loss: 0.1658, Train Acc: 0.9385, Val Loss: 0.3100, Val Acc: 0.8978, Val Macro-F1: 0.8980

Epoch 5/10 - Train Loss: 0.1654, Train Acc: 0.9385, Val Loss: 0.3101, Val Acc: 0.8975, Val Macro-F1: 0.8976

Epoch 6/10 - Train Loss: 0.1650, Train Acc: 0.9388, Val Loss: 0.3102, Val Acc: 0.8972, Val Macro-F1: 0.8973

Epoch 7/10 - Train Loss: 0.1647, Train Acc: 0.9391, Val Loss: 0.3104, Val Acc: 0.8975, Val Macro-F1: 0.8976

Epoch 8/10 - Train Loss: 0.1643, Train Acc: 0.9392, Val Loss: 0.3106, Val Acc: 0.8977, Val Macro-F1: 0.8978

Epoch 9/10 - Train Loss: 0.1640, Train Acc: 0.9392, Val Loss: 0.3107, Val Acc: 0.8977, Val Macro-F1: 0.8978

Epoch 10/10 - Train Loss: 0.1636, Train Acc: 0.9392, Val Loss: 0.3109, Val Acc: 0.8972, Val Macro-F1: 0.8973

Epoch 1/10 - Train Loss: 0.1680, Train Acc: 0.9382, Val Loss: 0.3039, Val Acc: 0.9010, Val Macro-F1: 0.9010

Epoch 2/10 - Train Loss: 0.1674, Train Acc: 0.9386, Val Loss: 0.3038, Val Acc: 0.9013, Val Macro-F1: 0.9013

Epoch 3/10 - Train Loss: 0.1669, Train Acc: 0.9387, Val Loss: 0.3038, Val Acc: 0.9013, Val Macro-F1: 0.9013

Epoch 4/10 - Train Loss: 0.1665, Train Acc: 0.9387, Val Loss: 0.3039, Val Acc: 0.9007, Val Macro-F1: 0.9006

Epoch 5/10 - Train Loss: 0.1661, Train Acc: 0.9388, Val Loss: 0.3040, Val Acc: 0.9008, Val Macro-F1: 0.9008

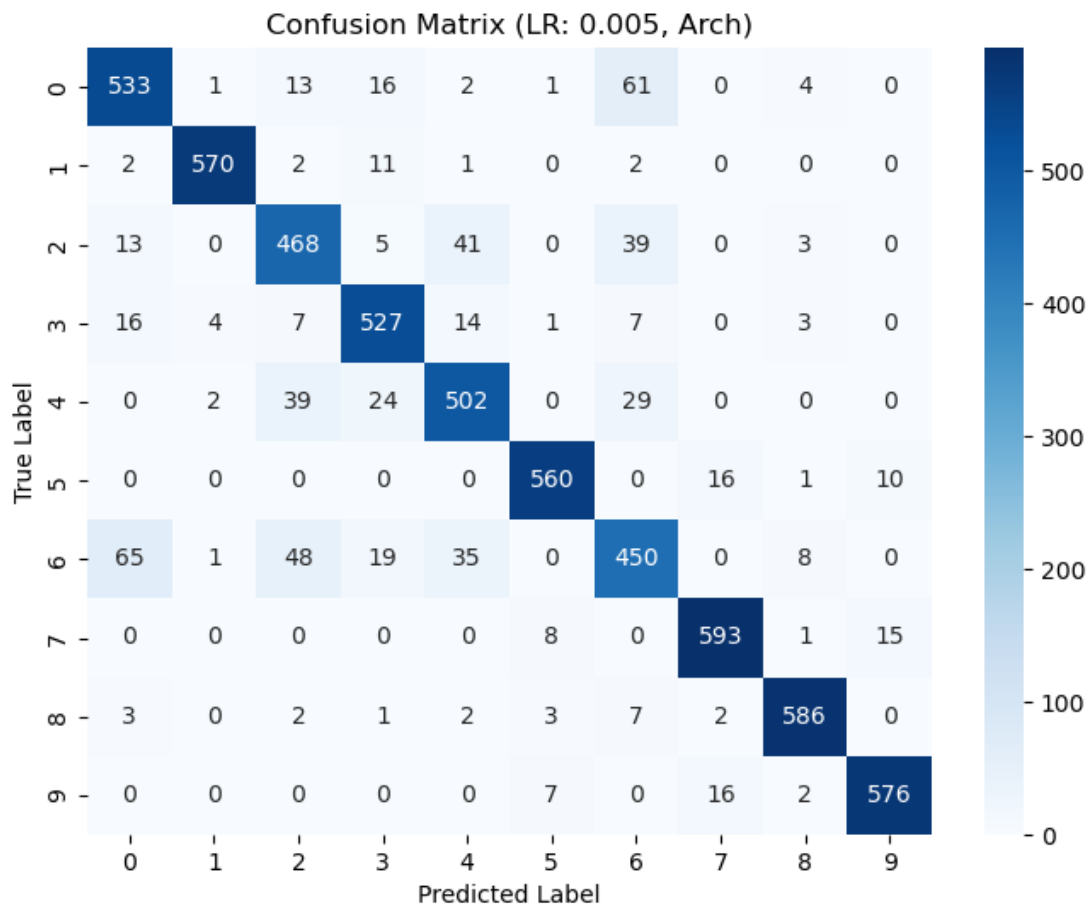
Epoch 6/10 - Train Loss: 0.1657, Train Acc: 0.9390, Val Loss: 0.3041, Val Acc: 0.9010, Val Macro-F1: 0.9010

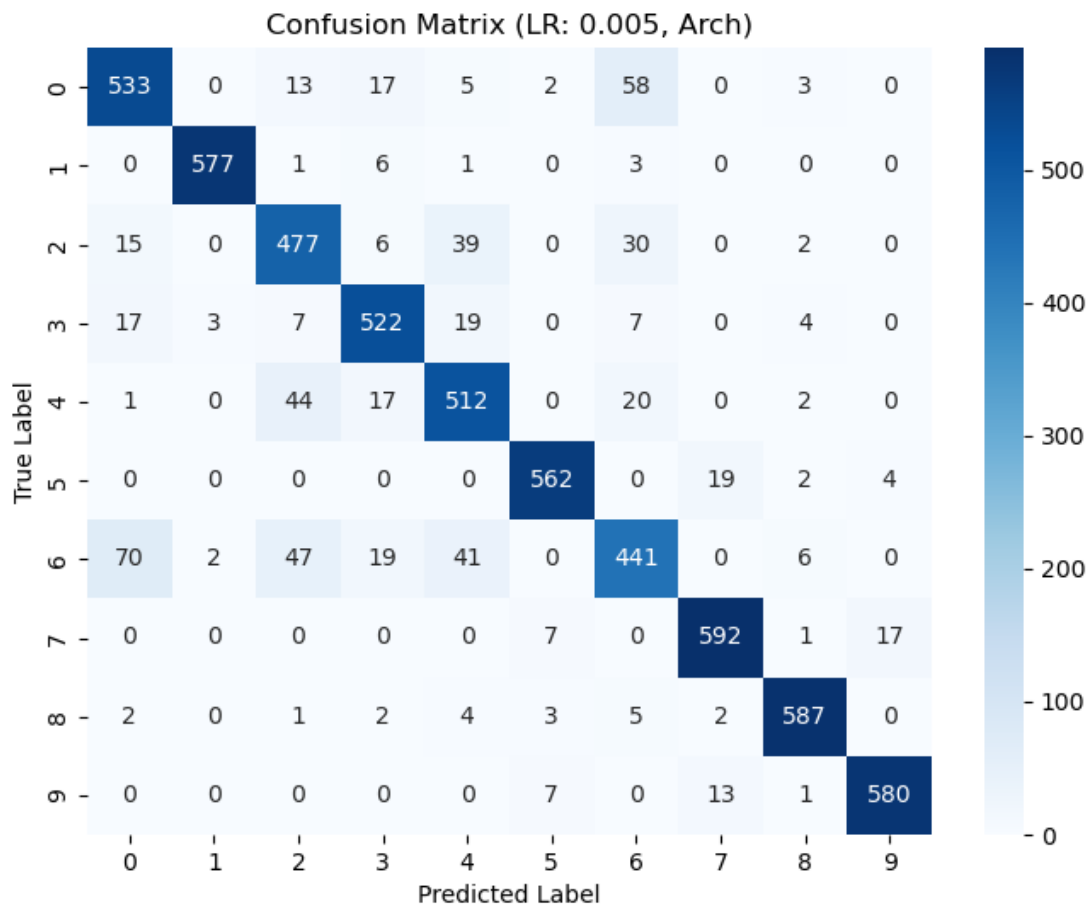
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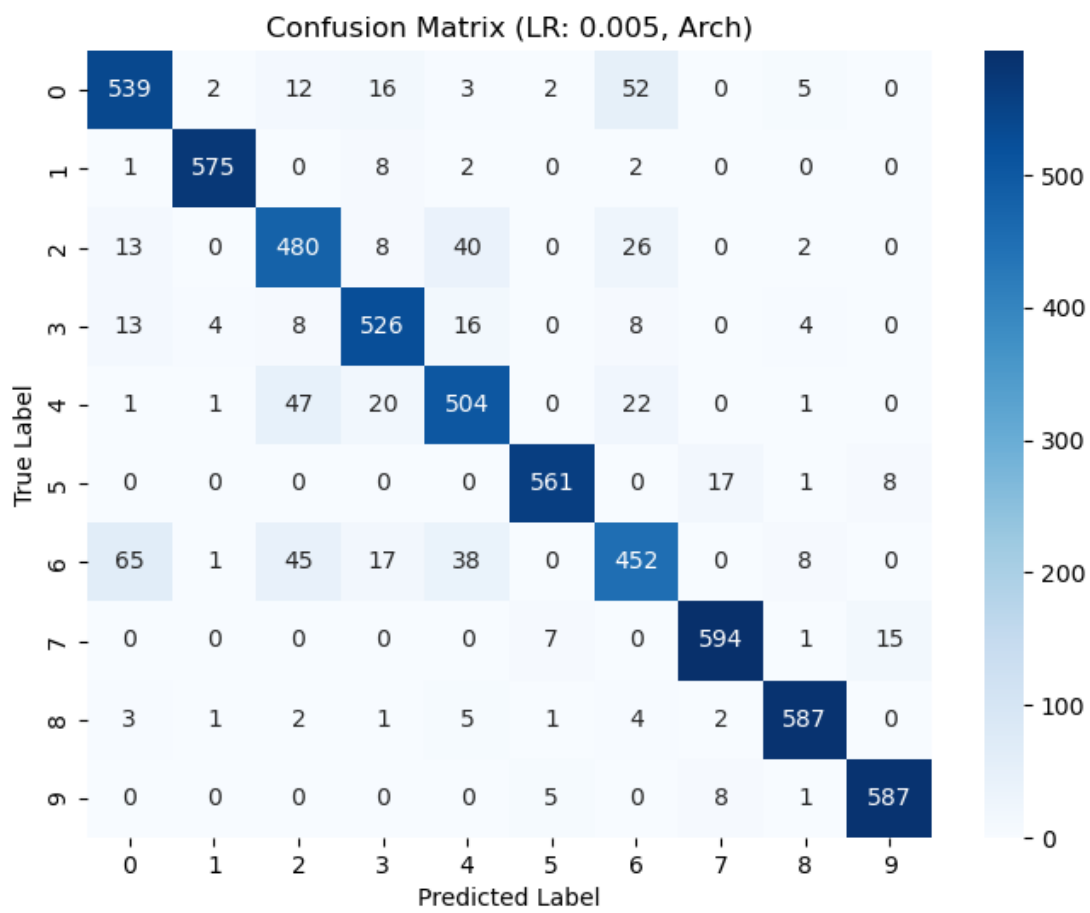
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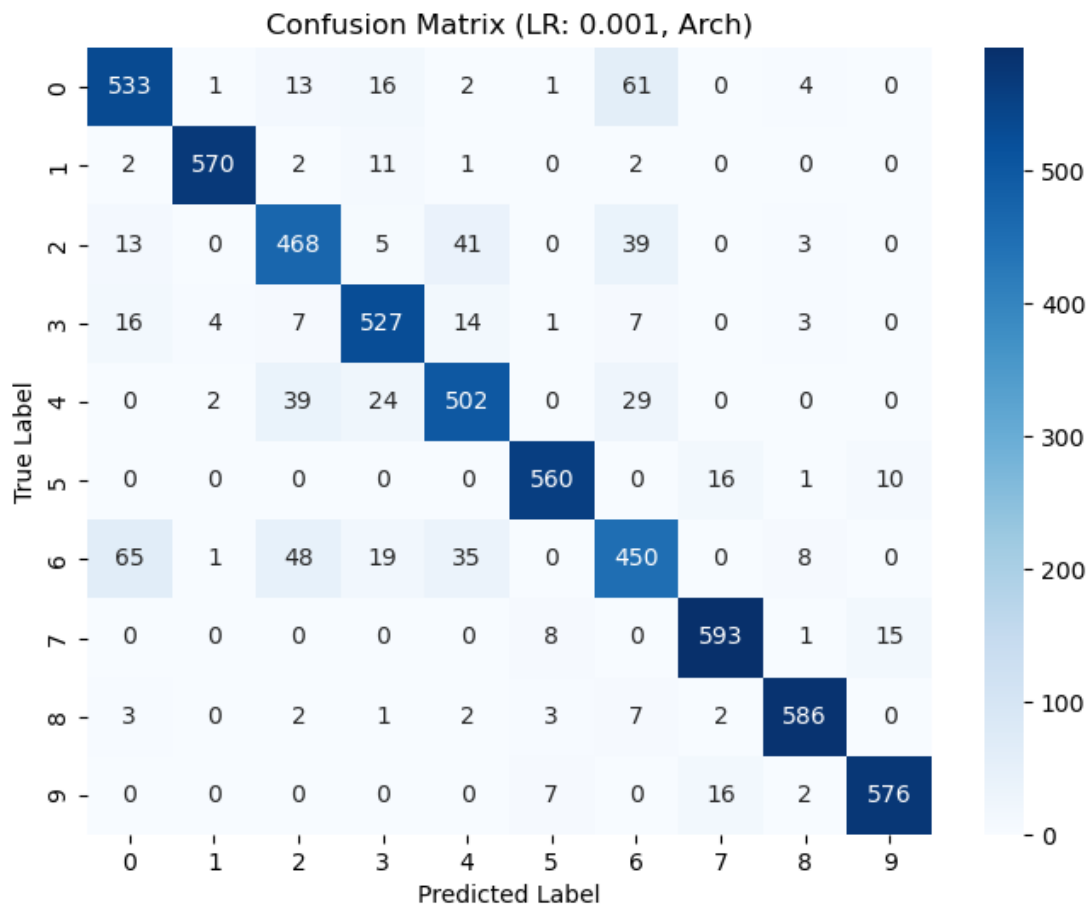
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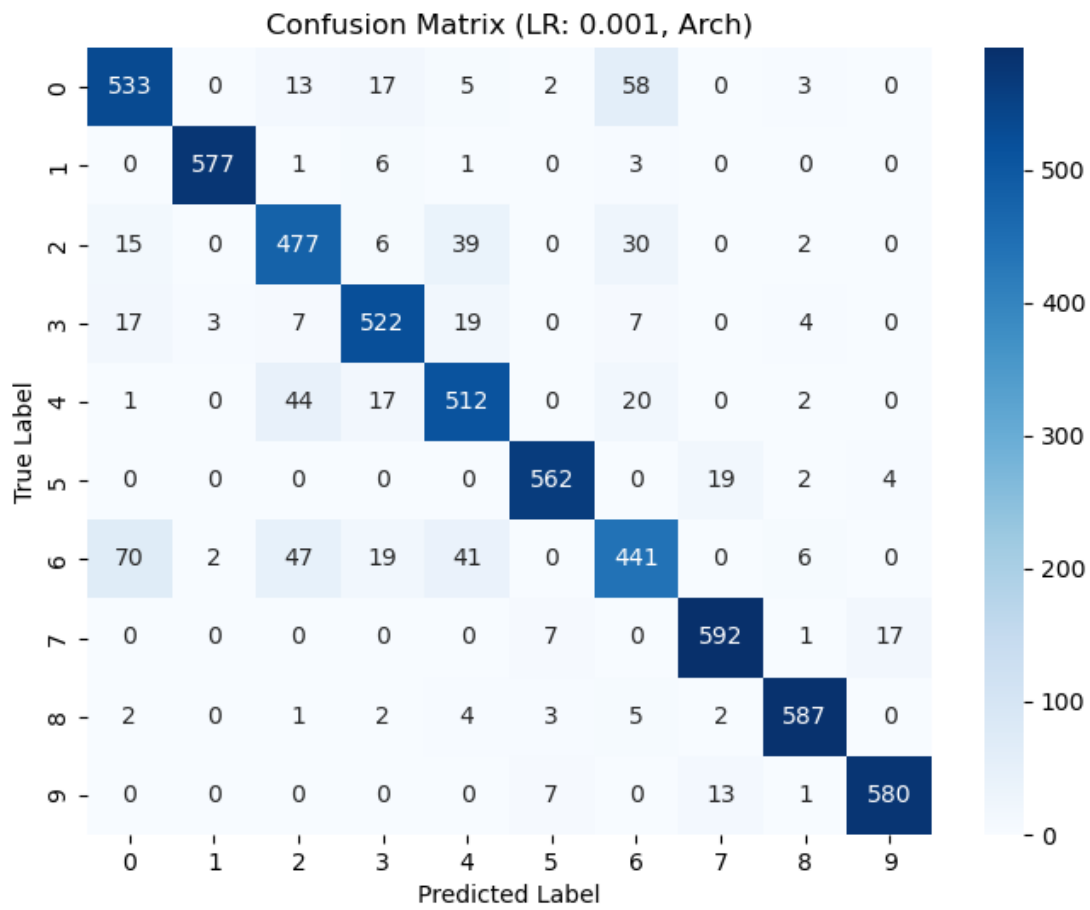
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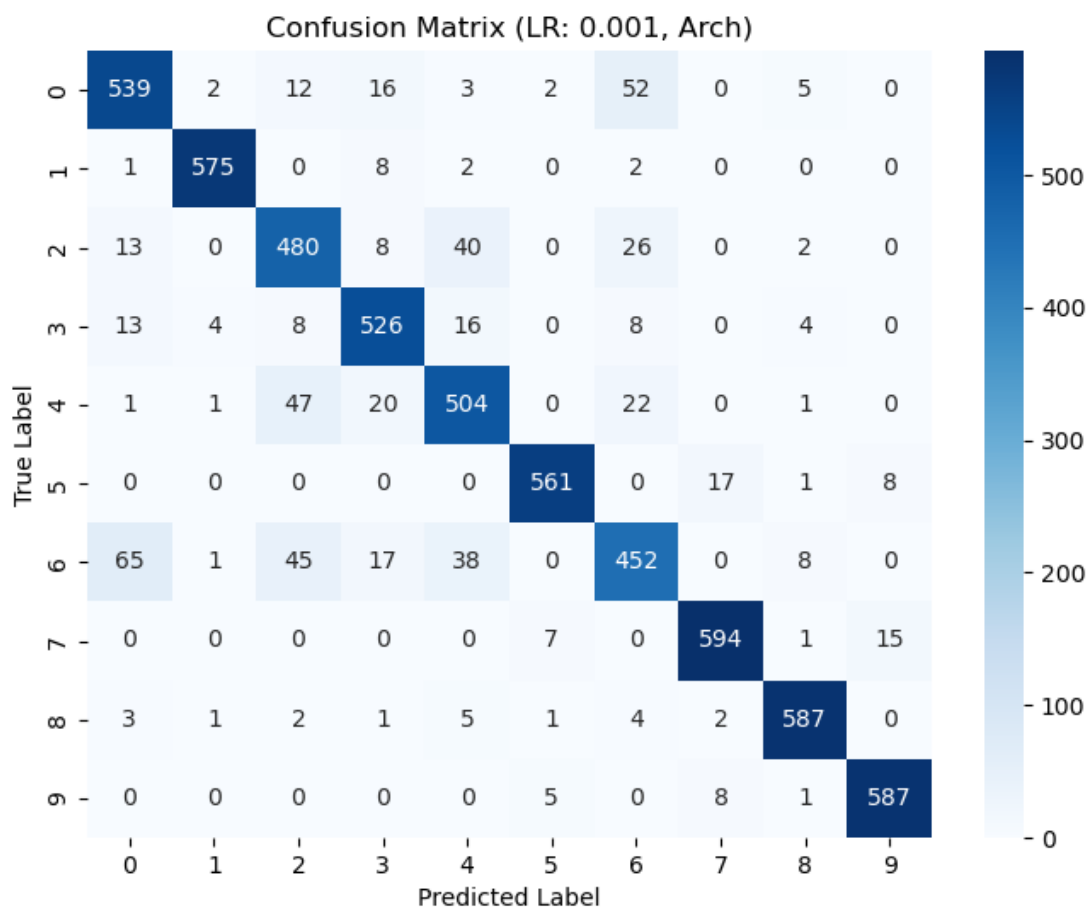




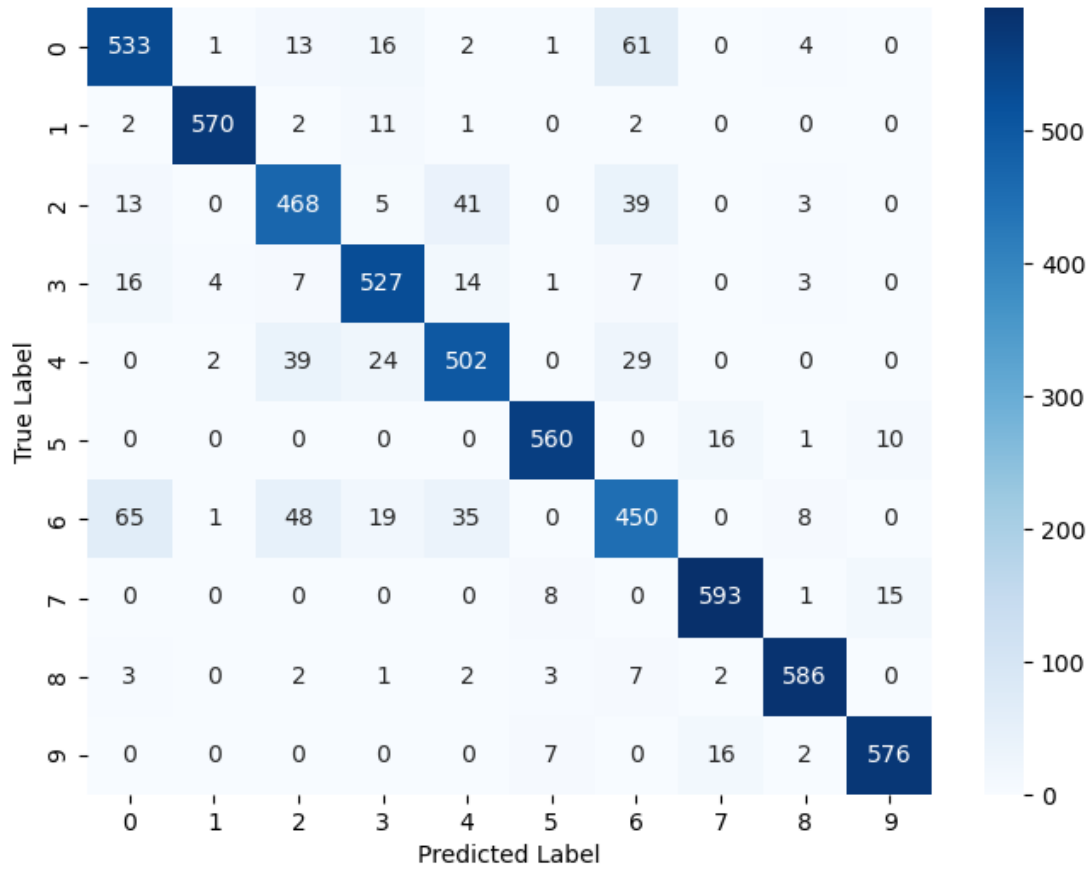


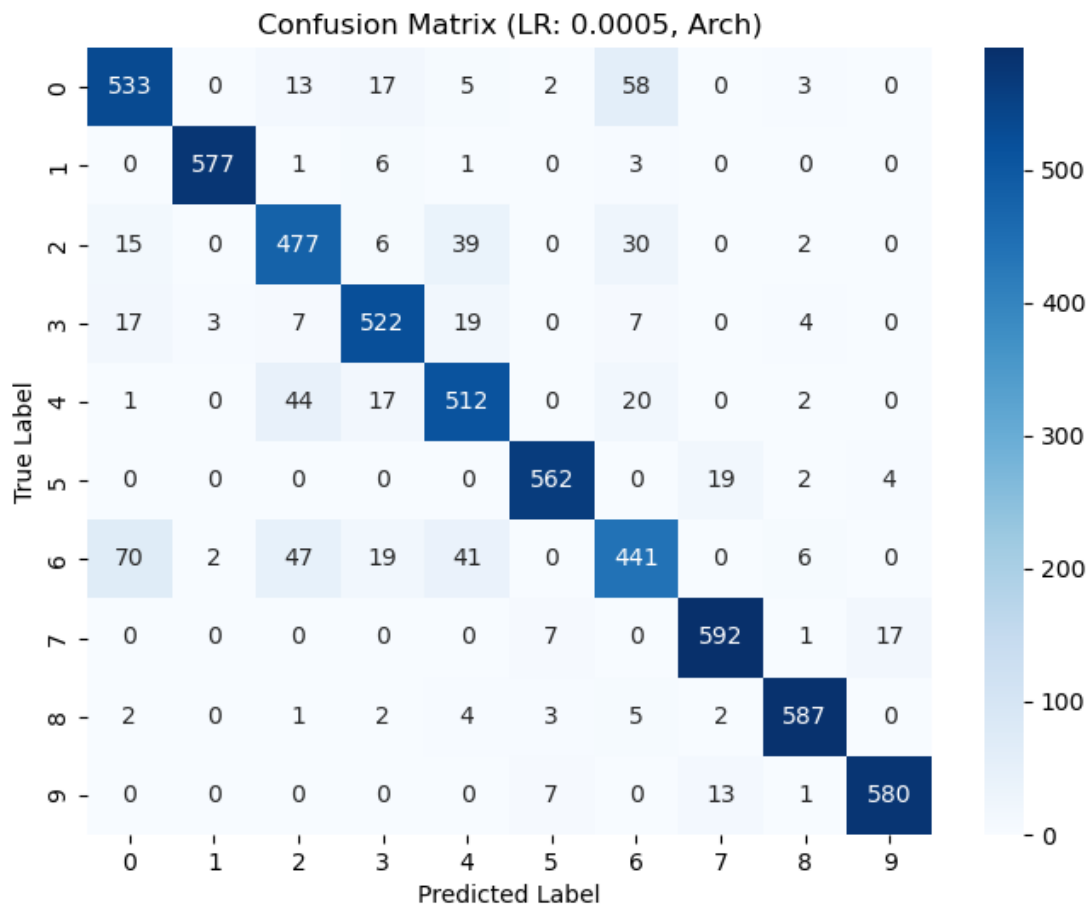




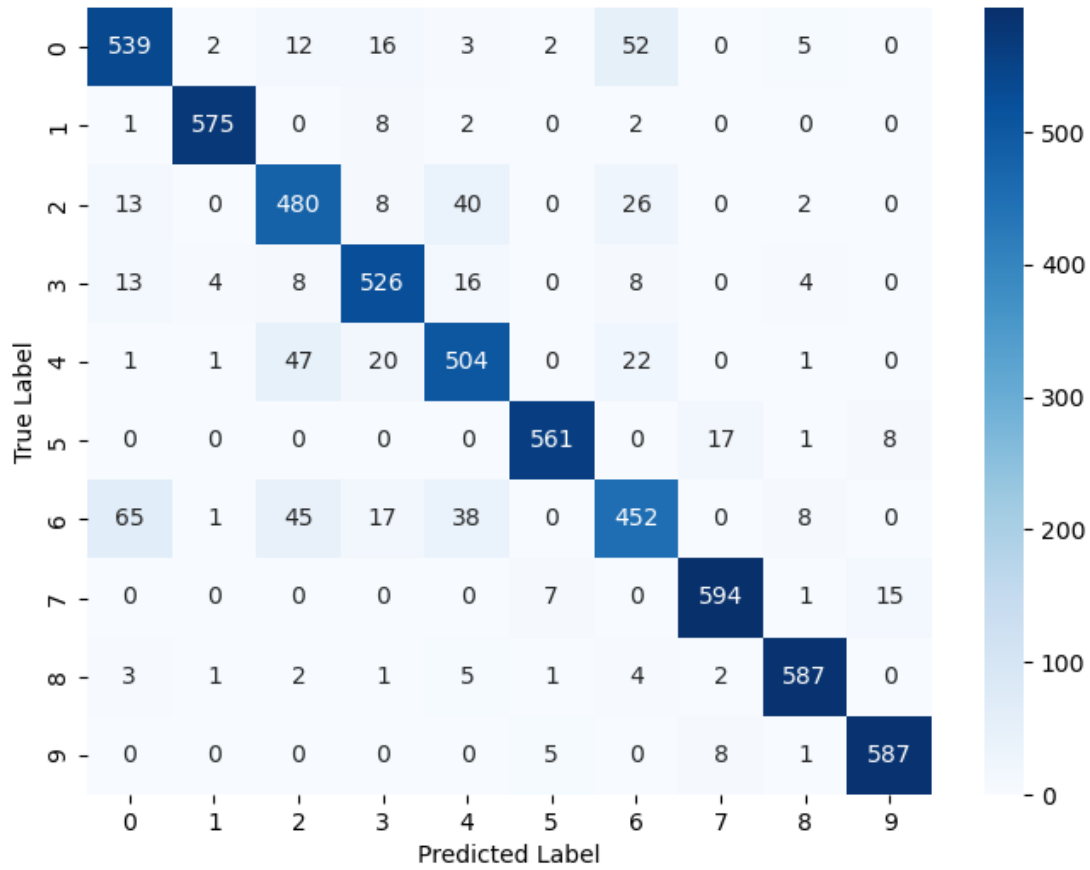


Confusion Matrix (LR: 0.0005, Arch)

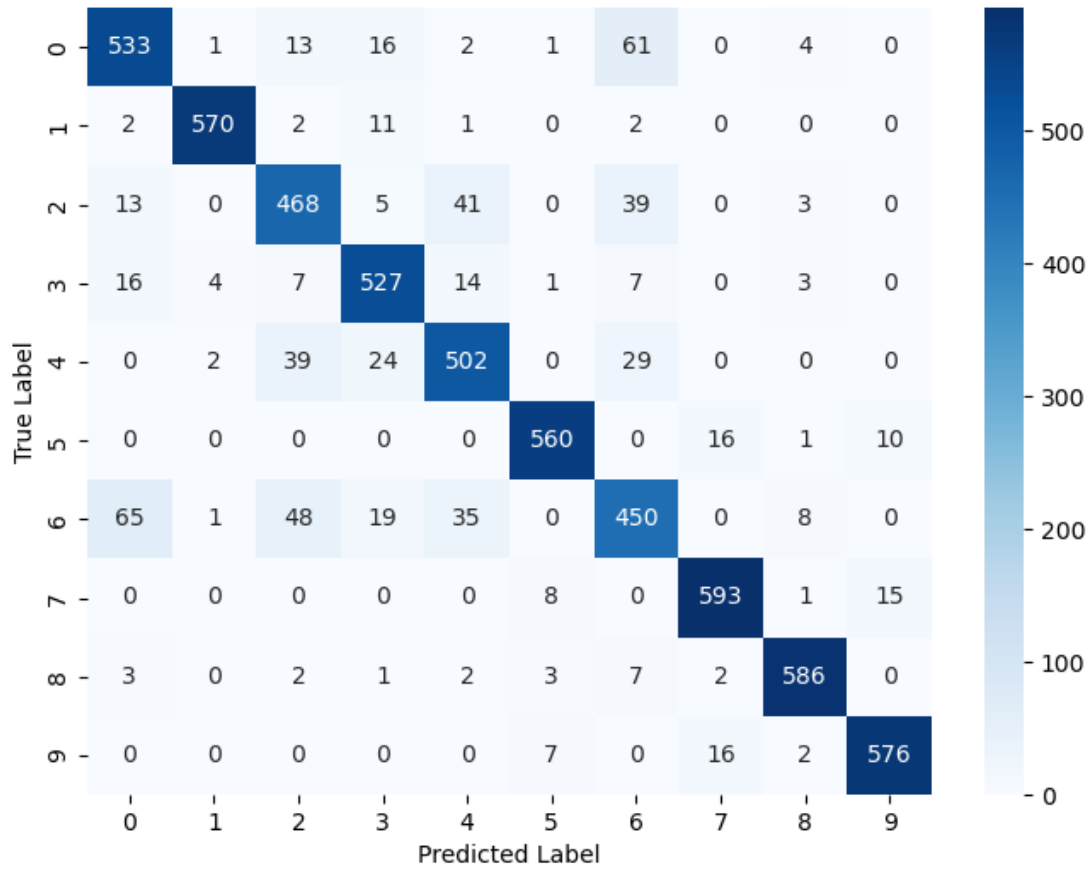


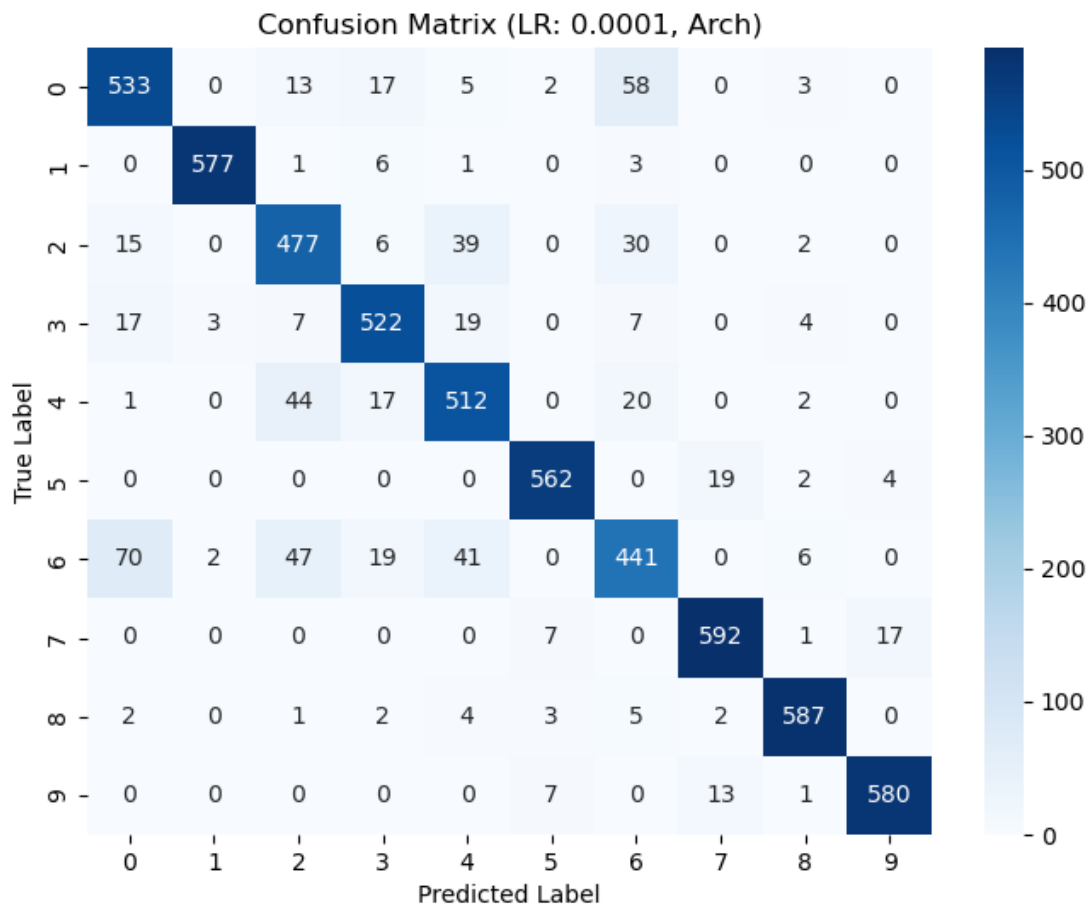


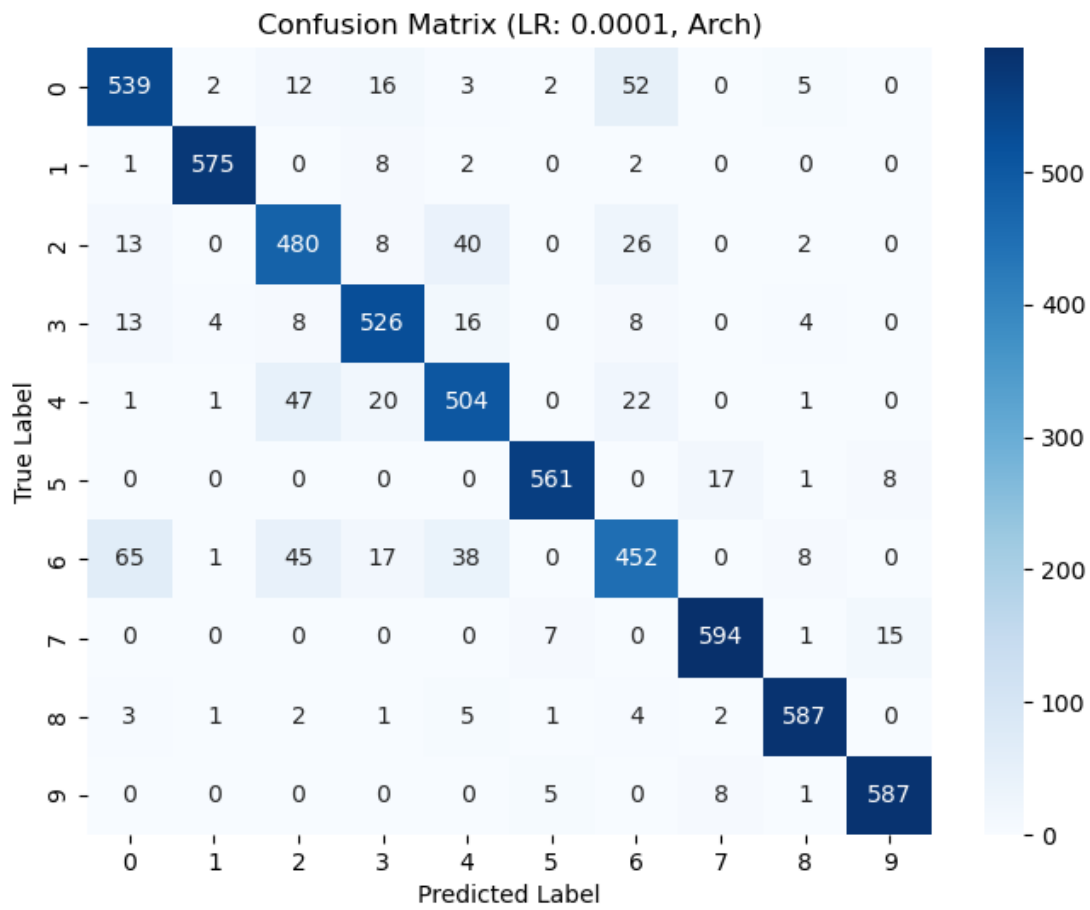
Confusion Matrix (LR: 0.0005, Arch)

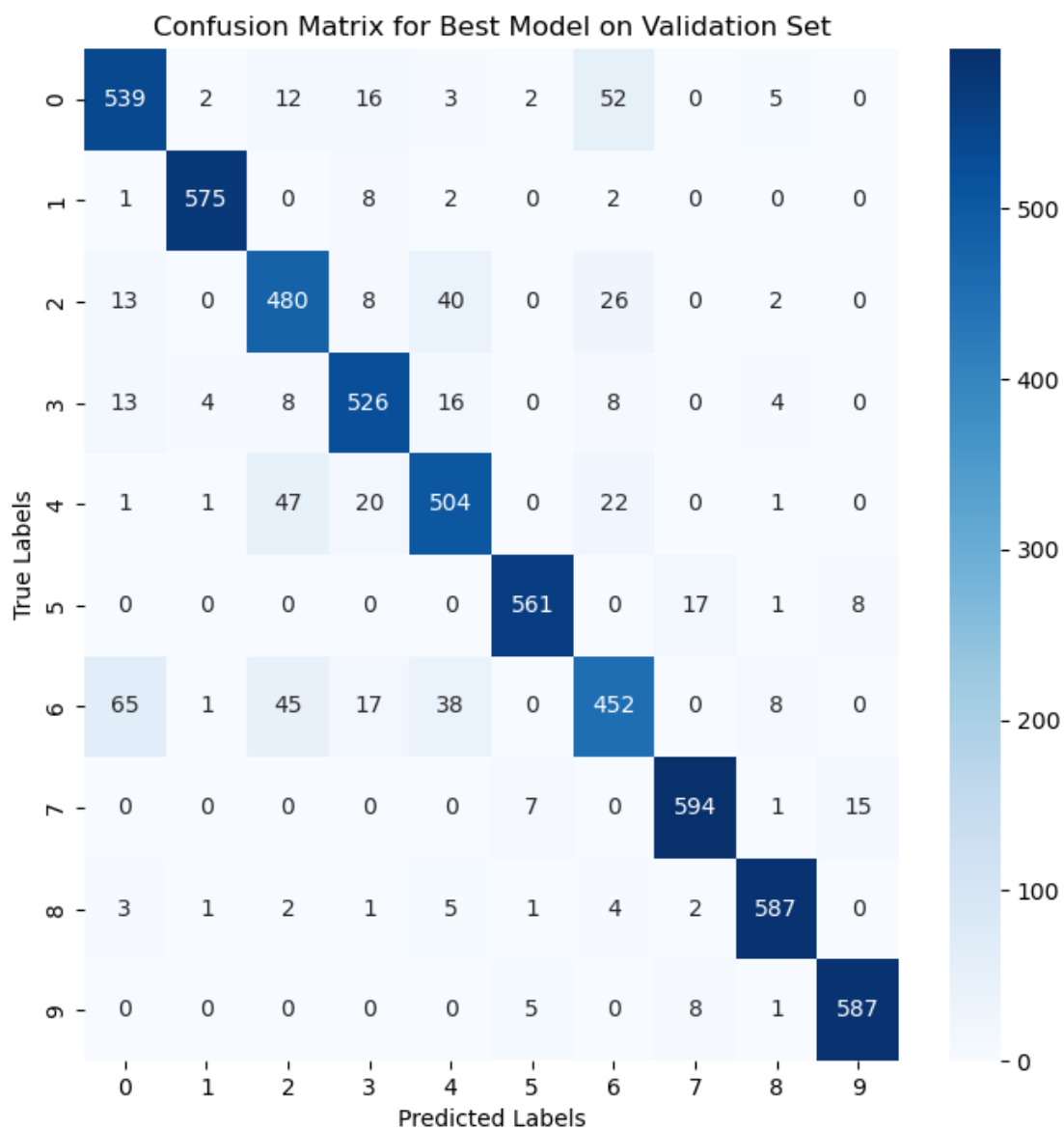


Confusion Matrix (LR: 0.0001, Arch)









Test Results:

Test Loss: 3.4797, Test Accuracy: 0.3858, Test Macro-F1: 0.2294