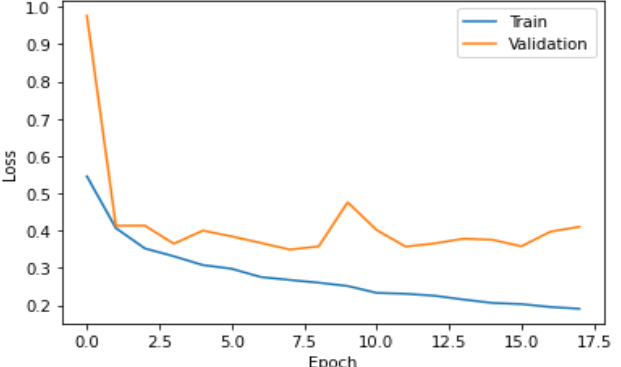
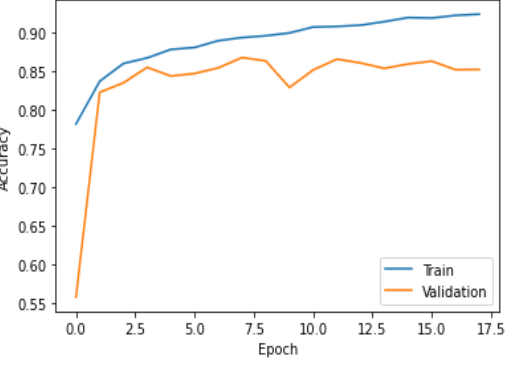
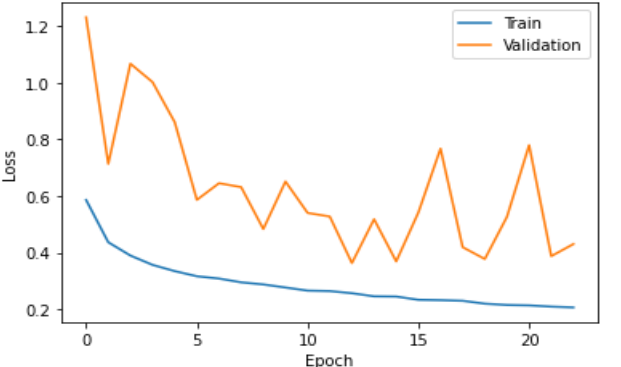
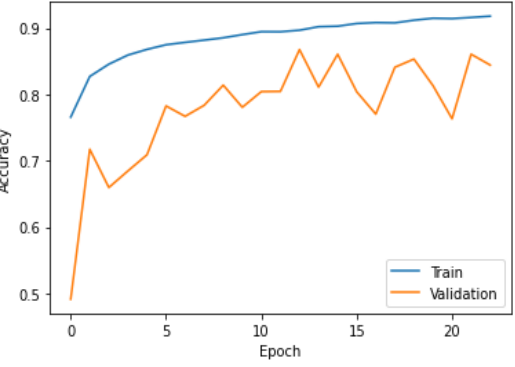
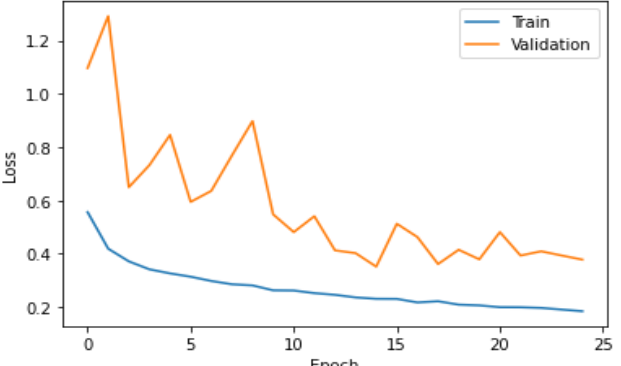
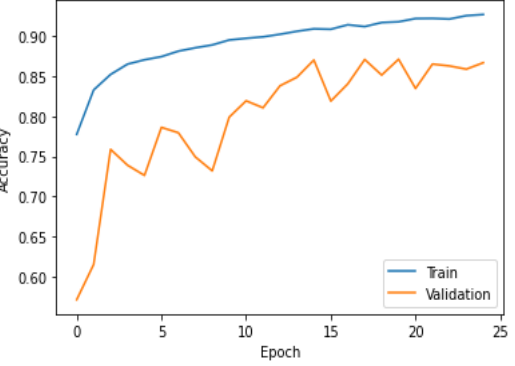


Combination name	Loss Plot	Accuracy Plot																																																																		
Adam_relu	<p data-bbox="596 297 767 320">Loss over epochs</p>  <p>This line plot shows the training and validation loss for the Adam_relu combination over 17.5 epochs. The training loss (blue line) starts at approximately 0.55 and decreases steadily to about 0.18. The validation loss (orange line) starts at 1.0, drops sharply to around 0.42 by epoch 1, and then fluctuates between 0.35 and 0.48 for the remainder of the training process.</p> <table border="1" data-bbox="347 320 970 685"><thead><tr><th>Epoch</th><th>Train Loss</th><th>Validation Loss</th></tr></thead><tbody><tr><td>0.0</td><td>0.55</td><td>1.00</td></tr><tr><td>2.5</td><td>0.35</td><td>0.40</td></tr><tr><td>5.0</td><td>0.30</td><td>0.40</td></tr><tr><td>7.5</td><td>0.28</td><td>0.35</td></tr><tr><td>10.0</td><td>0.25</td><td>0.40</td></tr><tr><td>12.5</td><td>0.23</td><td>0.38</td></tr><tr><td>15.0</td><td>0.21</td><td>0.38</td></tr><tr><td>17.5</td><td>0.18</td><td>0.42</td></tr></tbody></table>	Epoch	Train Loss	Validation Loss	0.0	0.55	1.00	2.5	0.35	0.40	5.0	0.30	0.40	7.5	0.28	0.35	10.0	0.25	0.40	12.5	0.23	0.38	15.0	0.21	0.38	17.5	0.18	0.42	<p data-bbox="1235 297 1374 320">Model Accuracy</p>  <p>This line plot shows the training and validation accuracy for the Adam_relu combination over 17.5 epochs. The training accuracy (blue line) starts at approximately 0.78 and increases to about 0.93. The validation accuracy (orange line) starts at 0.55, rises sharply to about 0.82 by epoch 1, and then fluctuates between 0.83 and 0.87.</p> <table border="1" data-bbox="1021 320 1538 685"><thead><tr><th>Epoch</th><th>Train Accuracy</th><th>Validation Accuracy</th></tr></thead><tbody><tr><td>0.0</td><td>0.78</td><td>0.55</td></tr><tr><td>2.5</td><td>0.85</td><td>0.82</td></tr><tr><td>5.0</td><td>0.88</td><td>0.85</td></tr><tr><td>7.5</td><td>0.90</td><td>0.86</td></tr><tr><td>10.0</td><td>0.91</td><td>0.84</td></tr><tr><td>12.5</td><td>0.92</td><td>0.86</td></tr><tr><td>15.0</td><td>0.93</td><td>0.85</td></tr><tr><td>17.5</td><td>0.93</td><td>0.85</td></tr></tbody></table>	Epoch	Train Accuracy	Validation Accuracy	0.0	0.78	0.55	2.5	0.85	0.82	5.0	0.88	0.85	7.5	0.90	0.86	10.0	0.91	0.84	12.5	0.92	0.86	15.0	0.93	0.85	17.5	0.93	0.85												
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Adam_sigmoid	<p data-bbox="596 707 767 730">Loss over epochs</p>  <p>This line plot shows the training and validation loss for the Adam_sigmoid combination over 22 epochs. The training loss (blue line) starts at approximately 0.6 and decreases to about 0.22. The validation loss (orange line) starts at 1.25, drops to 0.7, and then exhibits significant fluctuations, with peaks around 1.05 and 0.78, and troughs around 0.38 and 0.4.</p> <table border="1" data-bbox="347 730 970 1095"><thead><tr><th>Epoch</th><th>Train Loss</th><th>Validation Loss</th></tr></thead><tbody><tr><td>0.0</td><td>0.60</td><td>1.25</td></tr><tr><td>2.5</td><td>0.40</td><td>0.70</td></tr><tr><td>5.0</td><td>0.35</td><td>0.60</td></tr><tr><td>7.5</td><td>0.32</td><td>0.65</td></tr><tr><td>10.0</td><td>0.30</td><td>0.55</td></tr><tr><td>12.5</td><td>0.28</td><td>0.40</td></tr><tr><td>15.0</td><td>0.25</td><td>0.55</td></tr><tr><td>17.5</td><td>0.24</td><td>0.42</td></tr><tr><td>20.0</td><td>0.23</td><td>0.78</td></tr><tr><td>22.0</td><td>0.22</td><td>0.40</td></tr></tbody></table>	Epoch	Train Loss	Validation Loss	0.0	0.60	1.25	2.5	0.40	0.70	5.0	0.35	0.60	7.5	0.32	0.65	10.0	0.30	0.55	12.5	0.28	0.40	15.0	0.25	0.55	17.5	0.24	0.42	20.0	0.23	0.78	22.0	0.22	0.40	<p data-bbox="1235 707 1374 730">Model Accuracy</p>  <p>This line plot shows the training and validation accuracy for the Adam_sigmoid combination over 22 epochs. The training accuracy (blue line) starts at approximately 0.77 and increases to about 0.92. The validation accuracy (orange line) starts at 0.5, rises to 0.72, and then fluctuates significantly between 0.75 and 0.87.</p> <table border="1" data-bbox="1021 730 1538 1095"><thead><tr><th>Epoch</th><th>Train Accuracy</th><th>Validation Accuracy</th></tr></thead><tbody><tr><td>0.0</td><td>0.77</td><td>0.50</td></tr><tr><td>2.5</td><td>0.83</td><td>0.72</td></tr><tr><td>5.0</td><td>0.87</td><td>0.70</td></tr><tr><td>7.5</td><td>0.88</td><td>0.80</td></tr><tr><td>10.0</td><td>0.89</td><td>0.81</td></tr><tr><td>12.5</td><td>0.90</td><td>0.87</td></tr><tr><td>15.0</td><td>0.91</td><td>0.80</td></tr><tr><td>17.5</td><td>0.91</td><td>0.85</td></tr><tr><td>20.0</td><td>0.92</td><td>0.77</td></tr><tr><td>22.0</td><td>0.92</td><td>0.85</td></tr></tbody></table>	Epoch	Train Accuracy	Validation Accuracy	0.0	0.77	0.50	2.5	0.83	0.72	5.0	0.87	0.70	7.5	0.88	0.80	10.0	0.89	0.81	12.5	0.90	0.87	15.0	0.91	0.80	17.5	0.91	0.85	20.0	0.92	0.77	22.0	0.92	0.85
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Adam_tanh	<p data-bbox="596 1117 767 1140">Loss over epochs</p>  <p>This line plot shows the training and validation loss for the Adam_tanh combination over 25 epochs. The training loss (blue line) starts at approximately 0.55 and decreases to about 0.18. The validation loss (orange line) starts at 1.1, peaks at 1.25 around epoch 1, and then fluctuates between 0.35 and 0.9 throughout the training process.</p> <table border="1" data-bbox="347 1140 970 1505"><thead><tr><th>Epoch</th><th>Train Loss</th><th>Validation Loss</th></tr></thead><tbody><tr><td>0.0</td><td>0.55</td><td>1.10</td></tr><tr><td>2.5</td><td>0.40</td><td>0.65</td></tr><tr><td>5.0</td><td>0.35</td><td>0.60</td></tr><tr><td>7.5</td><td>0.30</td><td>0.90</td></tr><tr><td>10.0</td><td>0.28</td><td>0.50</td></tr><tr><td>12.5</td><td>0.25</td><td>0.40</td></tr><tr><td>15.0</td><td>0.23</td><td>0.50</td></tr><tr><td>17.5</td><td>0.22</td><td>0.38</td></tr><tr><td>20.0</td><td>0.21</td><td>0.45</td></tr><tr><td>22.5</td><td>0.20</td><td>0.38</td></tr></tbody></table>	Epoch	Train Loss	Validation Loss	0.0	0.55	1.10	2.5	0.40	0.65	5.0	0.35	0.60	7.5	0.30	0.90	10.0	0.28	0.50	12.5	0.25	0.40	15.0	0.23	0.50	17.5	0.22	0.38	20.0	0.21	0.45	22.5	0.20	0.38	<p data-bbox="1235 1117 1374 1140">Model Accuracy</p>  <p>This line plot shows the training and validation accuracy for the Adam_tanh combination over 25 epochs. The training accuracy (blue line) starts at approximately 0.77 and increases to about 0.93. The validation accuracy (orange line) starts at 0.58, rises to 0.75, and then fluctuates between 0.73 and 0.87.</p> <table border="1" data-bbox="1021 1140 1538 1505"><thead><tr><th>Epoch</th><th>Train Accuracy</th><th>Validation Accuracy</th></tr></thead><tbody><tr><td>0.0</td><td>0.77</td><td>0.58</td></tr><tr><td>2.5</td><td>0.84</td><td>0.75</td></tr><tr><td>5.0</td><td>0.87</td><td>0.73</td></tr><tr><td>7.5</td><td>0.88</td><td>0.78</td></tr><tr><td>10.0</td><td>0.89</td><td>0.82</td></tr><tr><td>12.5</td><td>0.90</td><td>0.85</td></tr><tr><td>15.0</td><td>0.91</td><td>0.82</td></tr><tr><td>17.5</td><td>0.92</td><td>0.87</td></tr><tr><td>20.0</td><td>0.92</td><td>0.84</td></tr><tr><td>22.5</td><td>0.93</td><td>0.86</td></tr></tbody></table>	Epoch	Train Accuracy	Validation Accuracy	0.0	0.77	0.58	2.5	0.84	0.75	5.0	0.87	0.73	7.5	0.88	0.78	10.0	0.89	0.82	12.5	0.90	0.85	15.0	0.91	0.82	17.5	0.92	0.87	20.0	0.92	0.84	22.5	0.93	0.86
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