

PATTERN SENSE: CLASSIFYING FABRIC PATTERNS USING DEEP LEARNING

Project Development Phase
Model Performance Test

Date	27 June 2025
Team ID	LTVIP2025TMID59821
Project Name	Pattern Sense: Classifying Fabric Patterns using Deep Learning
Maximum Marks	10 Marks

Model Performance Testing:

S.No.	Parameter	Values	Screenshot																																																																																																																																																																																															
1.	Metrics	<div>Classification Model: Confusion Matrix -, Accuracy Score- & Classification Report -</div>	<div>Confusion Matrix</div> <div><div>133/13331s151ms/step - accuracy: 0.8008 - loss: 0.6740</div><div>Final Accuracy on full dataset: 83.48%</div></div> <div><div>Confusion Matrix</div><table><tr><th>True label \ Predicted label</th><th>animal</th><th>cartoon</th><th>floral</th><th>geometry</th><th>ikat</th><th>plain</th><th>polka dot</th><th>squares</th><th>stripes</th><th>tribal</th></tr><tr><th>animal</th><td>45</td><td>3</td><td>4</td><td>1</td><td>1</td><td>3</td><td>4</td><td>1</td><td>0</td><td>8</td></tr><tr><th>cartoon</th><td>1</td><td>26</td><td>3</td><td>7</td><td>4</td><td>6</td><td>2</td><td>0</td><td>0</td><td>3</td></tr><tr><th>floral</th><td>2</td><td>15</td><td>52</td><td>2</td><td>7</td><td>1</td><td>1</td><td>1</td><td>1</td><td>17</td></tr><tr><th>geometry</th><td>3</td><td>9</td><td>5</td><td>17</td><td>2</td><td>2</td><td>8</td><td>7</td><td>5</td><td>9</td></tr><tr><th>ikat</th><td>4</td><td>7</td><td>7</td><td>5</td><td>22</td><td>2</td><td>3</td><td>2</td><td>2</td><td>17</td></tr><tr><th>plain</th><td>2</td><td>3</td><td>2</td><td>9</td><td>1</td><td>73</td><td>3</td><td>2</td><td>1</td><td>3</td></tr><tr><th>polka dot</th><td>2</td><td>3</td><td>2</td><td>5</td><td>1</td><td>3</td><td>71</td><td>11</td><td>0</td><td>1</td></tr><tr><th>squares</th><td>0</td><td>0</td><td>1</td><td>5</td><td>0</td><td>6</td><td>4</td><td>64</td><td>4</td><td>3</td></tr><tr><th>stripes</th><td>2</td><td>0</td><td>2</td><td>4</td><td>1</td><td>9</td><td>0</td><td>3</td><td>73</td><td>6</td></tr><tr><th>tribal</th><td>4</td><td>9</td><td>5</td><td>7</td><td>8</td><td>5</td><td>1</td><td>3</td><td>2</td><td>55</td></tr></table></div> <div><div>Classification Report</div><div>Classification Report:</div><table><tr><th></th><th>precision</th><th>recall</th><th>f1-score</th><th>support</th></tr><tr><td>animal</td><td>0.69</td><td>0.64</td><td>0.67</td><td>70</td></tr><tr><td>cartoon</td><td>0.35</td><td>0.50</td><td>0.41</td><td>52</td></tr><tr><td>floral</td><td>0.63</td><td>0.53</td><td>0.57</td><td>99</td></tr><tr><td>geometry</td><td>0.27</td><td>0.25</td><td>0.26</td><td>67</td></tr><tr><td>ikat</td><td>0.47</td><td>0.31</td><td>0.37</td><td>71</td></tr><tr><td>plain</td><td>0.66</td><td>0.74</td><td>0.70</td><td>99</td></tr><tr><td>polka dot</td><td>0.73</td><td>0.72</td><td>0.72</td><td>99</td></tr><tr><td>squares</td><td>0.68</td><td>0.74</td><td>0.71</td><td>87</td></tr><tr><td>stripes</td><td>0.83</td><td>0.73</td><td>0.78</td><td>100</td></tr><tr><td>tribal</td><td>0.45</td><td>0.56</td><td>0.50</td><td>99</td></tr><tr><td>accuracy</td><td></td><td></td><td>0.59</td><td>843</td></tr><tr><td>macro avg</td><td>0.58</td><td>0.57</td><td>0.57</td><td>843</td></tr><tr><td>weighted avg</td><td>0.60</td><td>0.59</td><td>0.59</td><td>843</td></tr></table></div>	True label \ Predicted label	animal	cartoon	floral	geometry	ikat	plain	polka dot	squares	stripes	tribal	animal	45	3	4	1	1	3	4	1	0	8	cartoon	1	26	3	7	4	6	2	0	0	3	floral	2	15	52	2	7	1	1	1	1	17	geometry	3	9	5	17	2	2	8	7	5	9	ikat	4	7	7	5	22	2	3	2	2	17	plain	2	3	2	9	1	73	3	2	1	3	polka dot	2	3	2	5	1	3	71	11	0	1	squares	0	0	1	5	0	6	4	64	4	3	stripes	2	0	2	4	1	9	0	3	73	6	tribal	4	9	5	7	8	5	1	3	2	55		precision	recall	f1-score	support	animal	0.69	0.64	0.67	70	cartoon	0.35	0.50	0.41	52	floral	0.63	0.53	0.57	99	geometry	0.27	0.25	0.26	67	ikat	0.47	0.31	0.37	71	plain	0.66	0.74	0.70	99	polka dot	0.73	0.72	0.72	99	squares	0.68	0.74	0.71	87	stripes	0.83	0.73	0.78	100	tribal	0.45	0.56	0.50	99	accuracy			0.59	843	macro avg	0.58	0.57	0.57	843	weighted avg	0.60	0.59	0.59	843
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