Config Comparison Results

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Config Name | Config Precision | Config Recall | Config F1-Score | Hybrid Config Precision | Hybrid Config Recall | Hybrid Config F1-Score | F1-Score Difference |
| config-02-gpt | 90.71% | 90.61% | 90.37% | 93.65% | 93.52% | 93.43% | 3.06% |
| config-04-bert | 91.61% | 91.4% | 91.31% | 92.89% | 92.72% | 92.52% | 1.21% |
| config-06-distillbert | 92.33% | 92.06% | 91.94% | 92.22% | 92.06% | 91.97% | 0.03% |
| config-05-roberta | 90.86% | 90.74% | 90.62% | 91.74% | 91.67% | 91.49% | 0.87% |
| config-09-spacy-trf | 89.16% | 88.89% | 88.8% | 91.83% | 91.53% | 91.45% | 2.65% |
| config-03-gpt-2 | 90.52% | 90.48% | 90.29% | 91.33% | 91.27% | 91.14% | 0.85% |
| config-08-spacy-lg | 90.27% | 90.21% | 90.03% | 91.58% | 91.14% | 91.01% | 0.98% |
| config-07-xlnet | 87.06% | 86.9% | 86.8% | 90.87% | 90.48% | 90.4% | 3.6% |
| config-01 | 88.29% | 88.1% | 87.83% | 90.4% | 89.95% | 89.87% | 2.04% |
| config-00-default | 85.73% | 85.65% | 85.38% | 86.9% | 86.82% | 86.6% | 1.22% |

|  |  |  |  |
| --- | --- | --- | --- |
| **Cross Validation Test Results** | | | |
| **Configuration Name** | **Precision** | **Recall** | **F1-Score** |
| **Best Config**  GPT LMF + Hybrid intent Classification | 93.65% | 93.52% | 93.43% |
| **Default Config** Rasa default configuration | 85.73% | 85.65% | 85.38% |

|  |  |  |  |
| --- | --- | --- | --- |
| **Cross Validation Test Results** | | | |
| **Configuration Name** | **Precision** | **Recall** | **F1-Score** |
| **Default Config + Hybrid CLF**  Default + Hybrid intent Classification | 86.90% | 86.82% | 86.60% |
| **Default Config** Rasa default configuration | 85.73% | 85.65% | 85.38% |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Configuration Name** | **Config** | | | **Config with Hybrid Intent Clf** | | | **F1-Score Diff** |
| **Precision** | **Recall** | **F1-Score** | **Precision** | **Recall** | **F1-Score** |
| config-02-gpt | 90.71% | 90.61% | 90.37% | 93.65% | 93.52% | 93.43% | 3.06% |
| config-04-bert | 91.61% | 91.4% | 91.31% | 92.89% | 92.72% | 92.52% | 1.21% |
| config-06-distillbert | 92.33% | 92.06% | 91.94% | 92.22% | 92.06% | 91.97% | 0.03% |
| config-05-roberta | 90.86% | 90.74% | 90.62% | 91.74% | 91.67% | 91.49% | 0.87% |
| config-09-spacy-trf | 89.16% | 88.89% | 88.8% | 91.83% | 91.53% | 91.45% | 2.65% |
| config-03-gpt-2 | 90.52% | 90.48% | 90.29% | 91.33% | 91.27% | 91.14% | 0.85% |
| config-08-spacy-lg | 90.27% | 90.21% | 90.03% | 91.58% | 91.14% | 91.01% | 0.98% |
| config-07-xlnet | 87.06% | 86.9% | 86.8% | 90.87% | 90.48% | 90.4% | 3.6% |
| config-01 | 88.29% | 88.1% | 87.83% | 90.4% | 89.95% | 89.87% | 2.04% |
| config-00-default | 85.73% | 85.65% | 85.38% | 86.9% | 86.82% | 86.6% | 1.22% |