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|---|---|---|---|---|---|
| BGE-M3 bi encoder + cross encoder | Vietnamese Query -- English Context | | | | |
| | Base line | Fine tune 1 | Fine tune 2 | | |
| | Acc1: 0.282 | Acc1: 0.440 | Acc1: 0.460 | | |
| | Acc5: 0.517 | Acc5: 0.654 | Acc5: 0.680 | | |
| | Acc10: 0.612 | Acc10: 0.722 | Acc10: 0.758 | | |
| | MRR10: 0.381 | MRR10: 0.527 | MRR10: 0.548 | | |
| | English Query -- Vietnamese Context | | | | |
| | Base line | Fine tune 1 | Fine tune 2 | | |
| | Acc1: 0.309 | Acc1: 0.434 | Acc1: 0.426 | | |
| | Acc5: 0.520 | Acc5: 0.632 | Acc5: 0.638 | | |
| | Acc10: 0.591 | Acc10: 0.708 | Acc10: 0.716 | | |
| | MRR10: 0.397 | MRR10: 0.518 | MRR10: 0.515 | | |
| | English Query -- English Context | | | | |
| | Base line | Fine tune 1 | Fine tune 2 | | |
| | Acc1: 0.365 | Acc1: 0.496 | Acc1: 0.490 | | |
| | Acc5: 0.561 | Acc5: 0.652 | Acc5: 0.656 | | |
| | Acc10: 0.639 | Acc10: 0.720 | Acc10: 0.738 | | |
| | MRR10: 0.448 | MRR10: 0.563 | MRR10: 0.562 | | |
| | Vietnamese Query -- Vietnamese Context | | | | |
| | Base line | Fine tune 1 | Fine tune 2 | | |
| | Acc1: 0.479 | Acc1: 0.564 | Acc1: 0.568 | | |
| | Acc5: 0.634 | Acc5: 0.742 | Acc5: 0.744 | | |
| | Acc10: 0.732 | Acc10: 0.812 | Acc10: 0.822 | | |
| | MRR10: 0.548 | MRR10: 0.642 | MRR10: 0.646 | | |
| | | | | | |
| | | | | | |
| xlm-roberta-base bi encoder | Vietnamese Query -- English Context | | | | |
| | Base line | No distill | Self distill output | distill output with bge | Transformer distill with bge |
| | Acc1: 0.003 | Acc1: 0.075 | Acc1: 0.081 | Acc1: 0.077 | Acc1: 0.085 |
| | Acc5: 0.014 | Acc5: 0.184 | Acc5: 0.184 | Acc5: 0.182 | Acc5: 0.203 |
| | Acc10: 0.037 | Acc10: 0.251 | Acc10: 0.243 | Acc10: 0.242 | Acc10: 0.284 |
| | MRR10: 0.009 | MRR10: 0.121 | MRR10: 0.125 | MRR10: 0.123 | MRR10: 0.138 |
| | English Query -- Vietnamese Context | | | | |
| | Base line | Fine tune no distill | Self distill output | distill output with bge | Transformer distill with bge |
| | Acc1: 0.024 | Acc1: 0.079 | Acc1: 0.089 | Acc1: 0.090 | Acc1: 0.089 |
| | Acc5: 0.062 | Acc5: 0.169 | Acc5: 0.193 | Acc5: 0.189 | Acc5: 0.205 |
| | Acc10: 0.095 | Acc10: 0.235 | Acc10: 0.254 | Acc10: 0.245 | Acc10: 0.268 |
| | MRR10: 0.040 | MRR10: 0.119 | MRR10: 0.119 | MRR10: 0.132 | MRR10: 0.139 |
| | English Query -- English Context | | | | |
| | Base line | Fine tune no distill | Self distill output | distill output with bge | Transformer distill with bge |
| | Acc1: 0.031 | Acc1: 0.101 | Acc1: 0.114 | Acc1: 0.114 | Acc1: 0.117 |
| | Acc5: 0.062 | Acc5: 0.206 | Acc5: 0.220 | Acc5: 0.218 | Acc5: 0.248 |
| | Acc10: 0.094 | Acc10: 0.279 | Acc10: 0.282 | Acc10: 0.279 | Acc10: 0.320 |
| | MRR10: 0.046 | MRR10: 0.147 | MRR10: 0.160 | MRR10: 0.160 | MRR10: 0.175 |
| | Vietnamese Query -- Vietnamese Context | | | | |
| | Base line | Fine tune no distill | Self distill output | distill output with bge | Transformer distill |
| | Acc1: 0.038 | Acc1: 0.158 | Acc1: 0.162 | Acc1: 0.177 | Acc1: 0.189 |
| | Acc5: 0.103 | Acc5: 0.301 | Acc5: 0.309 | Acc5: 0.317 | Acc5: 0.339 |
| | Acc10: 0.121 | Acc10: 0.366 | Acc10: 0.362 | Acc10: 0.394 | Acc10: 0.417 |
| | MRR10: 0.062 | MRR10: 0.218 | MRR10: 0.223 | MRR10: 0.240 | MRR10: 0.254 |