| Results of RQ3 | | | | | | | | | | | |
|-------------------|--------------------|-----------|--------|---------|----------------|--------|---------|--|--|--|--|
| Dataset | Variations | LinkRank | | | Linkrank - C2I | | | | | | |
| | | Precision | Recall | F-score | Precision | Recall | F-score | | | | |
| Apache/Beam | Known K | 89.03 | 89.03 | 89.03 | 89.48 | 89.46 | 89.47 | | | | |
| | Unknown-K (ABS) | 82.73 | 91.58 | 85.53 | 84.22 | 88.91 | 85.14 | | | | |
| | Unknown-K (REL) | 80.84 | 76.39 | 76.57 | 80.29 | 76.94 | 76.66 | | | | |
| Apache/Datafusion | Known K | 91.45 | 91.45 | 91.45 | 90.65 | 90.65 | 90.65 | | | | |
| | Unknown-K (ABS) | 84.35 | 93.37 | 87.69 | 84.78 | 92.32 | 87.43 | | | | |
| | Unknown-K (REL) | 85.72 | 79.46 | 80.62 | 84.86 | 80.14 | 80.49 | | | | |
| Apache/Superset | Known K | 94.48 | 94.48 | 94.48 | 93.29 | 93.29 | 93.29 | | | | |
| | Unknown-K (ABS) | 90.64 | 94.51 | 91.79 | 88.65 | 92.28 | 89.49 | | | | |
| | Unknown-K (REL) | 89.31 | 85.88 | 86.6 | 87.25 | 86.5 | 86.07 | | | | |
| Apache/Mxnet | Known K | 90.94 | 90.94 | 90.94 | 94.58 | 94.58 | 94.58 | | | | |
| | Unknown-K (ABS) | 87.26 | 92.57 | 89.19 | 86.33 | 93.59 | 88.7 | | | | |
| | Unknown-K (REL) | 85.76 | 83.55 | 83.46 | 87.98 | 87.34 | 86.49 | | | | |
| Apache/Dubbo | Known K | 93.1 | 93.1 | 93.1 | 90.59 | 90.59 | 90.59 | | | | |
| | Unknown-K (ABS) | 88.46 | 91.81 | 89.11 | 82.48 | 91.28 | 85.57 | | | | |
| | Unknown-K (REL) | 87.31 | 82.64 | 83.59 | 84.12 | 87.22 | 84.53 | | | | |
| Apache/iceberg | Known K | 93.16 | 93.16 | 93.16 | 94.61 | 94.61 | 94.61 | | | | |
| | Unknown-K (ABS) | 88.77 | 93.51 | 90.08 | 90.06 | 94.66 | 91.61 | | | | |
| | Unknown-K | 87.99 | 85.53 | 85.59 | 87.35 | 85.57 | 85.41 | | | | |

| | (REL) | | | | | | |
|------------|--------------------|-------|-------|-------|-------|-------|-------|
| Kubernetes | Known K | 87.8 | 87.8 | 87.8 | 93.36 | 93.36 | 93.36 |
| | Unknown-K (ABS) | 81.46 | 91.46 | 84.93 | 88.38 | 94.63 | 90.32 |
| | Unknown-K (REL) | 81.78 | 70.22 | 72.97 | 88.35 | 88.15 | 86.67 |
| grpc | Known K | 94.49 | 94.49 | 94.49 | 88.02 | 88.02 | 88.02 |
| | Unknown-K (ABS) | 88.38 | 95.4 | 90.71 | 81.3 | 88.62 | 83.29 |
| | Unknown-K (REL) | 90.12 | 87.45 | 87.3 | 78.51 | 77.16 | 75.5 |
| Tensorflow | Known K | 94.62 | 94.62 | 94.62 | 92.06 | 92.06 | 92.06 |
| | Unknown-K (ABS) | 87.94 | 95.7 | 90.61 | 82.51 | 95.07 | 87.27 |
| | Unknown-K (REL) | 89.78 | 82.09 | 84.0 | 84.41 | 88.15 | 85.03 |
| cpython | Known K | 90.19 | 90.19 | 90.19 | 94.78 | 94.78 | 94.78 |
| | Unknown-K (ABS) | 87.52 | 94.85 | 89.89 | 89.89 | 95.17 | 91.62 |
| | Unknown-K (REL) | 86.55 | 89.36 | 87.09 | 90.63 | 86.75 | 87.0 |