

file_name	Organic	Jspirit	DeepSeek-R1	gpt-5-mini	Llama-3.3	Qwen2.5-Coder	ORACLE	PREDICTION
AnalysisContext.java	0	1	0	1	0	0	0	0
AssemblyProcessor.java	1	0	0	0	0	0	1	0
BitMatrix.java	0	1	0	1	1	0	0	1
BrokerController.java	0	1	1	0	1	0	1	1
CameraInputController.java	1	0	1	1	0	0	0	1
ClientHead.java	0	1	1	1	0	0	0	1
Closer.java	0	1	0	1	0	0	1	0
com.taobao.arthas.bytekit.asm.interceptor.InterceptorProcessor.java	1	0	0	1	1	0	0	1
Connection.java	1	1	1	1	1	0	1	1
Excluder.java	1	1	1	1	0	0	0	1
Hikaricfg.java	1	1	1	1	1	0	1	1
HikariPool.java	0	1	0	0	0	0	0	0
HttpServerTest.java	0	1	1	1	0	0	1	1
JSONTokenizer.java	1	0	0	1	0	0	1	0
JUnitCommandLineParseResult.java	1	0	0	0	0	0	0	0
Lexeme.java	0	1	0	0	0	0	1	0
Lifecycle.java	1	0	0	0	1	0	0	0
NacosDiscoveryProperties.java	0	0	0	1	1	0	0	0
NiceSecurePasswordField.java	0	1	1	1	1	0	1	1
ParamFlowChecker.java	1	0	1	1	0	0	1	1
ParserConfig.java	1	1	1	0	1	0	1	1
PooledDataSource.java	1	0	1	1	0	0	1	1
RandomService.java	0	1	1	0	0	0	1	0
RedissonObject.java	0	1	0	1	1	0	1	1
SaTokenConfig.java	0	1	0	1	1	0	1	1
Selectable.java	0	1	0	1	1	0	1	1
TextEditorUtils.java	1	0	0	0	0	0	0	0
TokenQueue.java	1	0	1	0	0	0	0	0
UmsMemberService.java	0	1	0	1	0	0	0	0
XxJobInfoDao.java	0	1	0	0	0	0	0	0

RATERS VS HUMAN ORACLE (RQ1 &amp; RQ2)

Jspirit			
TP	TN	FP	FN
12	7	4	7

Jspirit			
Precision	Recall	F1	
0.75	0.63	0.69	

Organic

Organic			
TP	TN	FP	FN
7	7	9	7

Organic

Organic			
Precision	Recall	F1	
0.44	0.50	0.47	

DeepSeek-R1

DeepSeek-R1			
TP	TN	FP	FN
9	10	7	4

DeepSeek-R1

DeepSeek-R1			
Precision	Recall	F1	
0.56	0.69	0.62	

gpt-5-mini

gpt-5-mini			
TP	TN	FP	FN
11	6	5	8

gpt-5-mini

gpt-5-mini			
Precision	Recall	F1	
0.69	0.58	0.63	

Llama-3.3

Llama-3.3			
TP	TN	FP	FN
8	10	8	4

Llama-3.3

Llama-3.3			
Precision	Recall	F1	
0.50	0.67	0.57	

Qwen2.5-Coder

Qwen2.5-Coder			
TP	TN	FP	FN
0	14	16	0

Qwen2.5-Coder

Qwen2.5-Coder			
Precision	Recall	F1	
0.00	0.00	0.00	

RATERS VS PREDICTIONS

Jspirit			
TP	TN	FP	FN
12	7	4	7

Jspirit

Jspirit			
Precision	Recall	F1	
0.75	0.63	0.69	

Organic

Organic			
TP	TN	FP	FN
8	8	8	6

DeepSeek-R1

DeepSeek-R1			
TP	TN	FP	FN
11	12	5	2

DeepSeek-R1

DeepSeek-R1			
Precision	Recall	F1	
0.68	0.85	0.76	

gpt-5-mini

gpt-5-mini			
TP	TN	FP	FN
14	9	2	5

gpt-5-mini

gpt-5-mini			
Precision	Recall	F1	
0.88	0.74	0.80	

Llama-3.3

Llama-3.3			
TP	TN	FP	FN
10	12	6	2

Llama-3.3

Llama-3.3			
Precision	Recall	F1	
0.63	0.83	0.71	

Qwen2.5-Coder

Qwen2.5-Coder			
TP	TN	FP	FN
0	14	16	0

Qwen2.5-Coder

Qwen2.5-Coder			
Precision	Recall	F1	
0.00	0.00	0.00	

HUMAN ORACLE VS PREDICTIONS (RQ3)

Jspirit			
TP	TN	FP	FN
11	9	5	5

Jspirit

Jspirit			
Precision	Recall	F1	
0.69	0.69	0.69	