

# Results: Mutation Extents, Feature Weighting and Information Pruning

## Legend

Label	Comment
_0.25, ...	Mutation Extent of 0.25
_0.25+w, ...	Mutation 0.25 and Feature Weighting
_0.25+w+iP(x), ...	Mutation 0.25, Feature Weighting, Information Prune (top x% chosen)

## ant

Rank	Treatment	Median	IQR	
1	ant_Base	0.08	0.08	●—
1	ant_0.25_iP(25%)	0.09	0.08	—●
1	ant_0.25_w_iP(25%)	0.1	0.06	—●
2	ant_0.5_iP(25%)	0.13	0.08	—●
2	ant_0.5_w_iP(25%)	0.15	0.06	—●
3	ant_0.25_iP(50%)	0.18	0.11	—●—
3	ant_0.25_w_iP(50%)	0.2	0.09	—●—
3	ant_0.75_w_iP(25%)	0.22	0.13	—●—
3	ant_0.75_iP(25%)	0.25	0.17	—●—
4	ant_0.25_w	0.26	0.08	●—
4	ant_0.25_iP(75%)	0.27	0.04	—●
4	ant_0.25	0.28	0.09	—●—
4	ant_0.5_iP(50%)	0.3	0.16	—●—
4	ant_0.25_w_iP(75%)	0.31	0.1	—●—
4	ant_0.5_w_iP(50%)	0.32	0.21	—●—
5	ant_0.75_w_iP(50%)	0.4	0.21	—●—
5	ant_0.75_iP(50%)	0.41	0.2	—●—
5	ant_0.5	0.41	0.15	—●—
5	ant_0.5_w_iP(75%)	0.43	0.17	—●—
5	ant_0.5_w	0.43	0.2	—●—
5	ant_0.5_iP(75%)	0.43	0.07	—●
6	ant_0.75_w_iP(75%)	0.55	0.16	—●—
6	ant_0.75	0.56	0.14	—●—
6	ant_0.75_w	0.57	0.15	—●—
6	ant_0.75_iP(75%)	0.6	0.16	—●—

## camel

Rank	Treatment	Median	IQR	
1	camel_Base	0.13	0.07	—●
1	camel0.25_iP(25%)	0.15	0.09	●—
2	camel0.25_w_iP(50%)	0.19	0.04	—●
2	camel0.25_w_iP(25%)	0.21	0.08	—●
2	camel0.25_iP(50%)	0.2	0.1	●—
2	camel0.5_w_iP(25%)	0.23	0.08	●—
3	camel0.75_w_iP(25%)	0.24	0.11	—●
3	camel0.75_iP(50%)	0.26	0.1	—●
3	camel0.5_iP(25%)	0.27	0.07	—●
3	camel0.25_iP(75%)	0.28	0.07	—●
3	camel0.75_iP(25%)	0.28	0.09	—●
3	camel0.5_iP(50%)	0.28	0.09	—●
3	camel0.5_w_iP(50%)	0.3	0.09	—●
3	camel0.25_w_iP(75%)	0.31	0.08	—●
3	camel0.75_w_iP(50%)	0.31	0.16	—●
3	camel0.25_w	0.34	0.08	—●
4	camel0.25	0.35	0.1	—●
4	camel0.5_w_iP(75%)	0.37	0.18	—●
4	camel0.5_iP(75%)	0.36	0.05	—●
5	camel0.75_iP(75%)	0.43	0.2	—●
5	camel0.5	0.47	0.09	—●
5	camel0.5_w	0.47	0.12	—●
5	camel0.75_w	0.49	0.14	—●
5	camel0.75_w_iP(75%)	0.51	0.13	—●
5	camel0.75	0.53	0.16	—●

## ivy

Rank	Treatment	Median	IQR	
1	ivy_0.5.iP(25%)	0.15	0.22	
1	ivy_0.25.w.iP(25%)	0.16	0.15	
1	ivy_0.75.iP(25%)	0.18	0.17	
1	ivy_0.5.w.iP(25%)	0.18	0.1	
1	ivy_Base	0.21	0.2	
1	ivy_0.75.w.iP(25%)	0.22	0.15	
2	ivy_0.25.w.iP(50%)	0.25	0.08	
2	ivy_0.25.w	0.26	0.11	
2	ivy_0.25.iP(50%)	0.25	0.14	
2	ivy_0.25.iP(75%)	0.27	0.19	
2	ivy_0.25.iP(25%)	0.27	0.19	
2	ivy_0.25.w.iP(75%)	0.3	0.2	
2	ivy_0.25	0.28	0.15	
2	ivy_0.5.iP(50%)	0.31	0.25	
2	ivy_0.5.w.iP(50%)	0.33	0.15	
3	ivy_0.5	0.36	0.15	
3	ivy_0.75.w.iP(50%)	0.37	0.16	
3	ivy_0.5.w.iP(75%)	0.37	0.1	
3	ivy_0.75.iP(50%)	0.38	0.14	
3	ivy_0.5.iP(75%)	0.39	0.08	
3	ivy_0.75.iP(75%)	0.42	0.05	
3	ivy_0.5.w	0.41	0.14	
4	ivy_0.75.w.iP(75%)	0.48	0.08	
4	ivy_0.75	0.49	0.07	
4	ivy_0.75.w	0.53	0.1	

## jedit

Rank	Treatment	Median	IQR	
1	jedit_Base	0.08	0.11	
2	jedit_0.25_w_iP(25%)	0.2	0.11	
2	jedit_0.25_iP(25%)	0.21	0.14	
2	jedit_0.5_w_iP(25%)	0.23	0.1	
2	jedit_0.5_iP(25%)	0.22	0.1	
3	jedit_0.25_iP(50%)	0.25	0.06	
3	jedit_0.75_iP(25%)	0.23	0.06	
3	jedit_0.25_w_iP(50%)	0.24	0.06	
3	jedit_0.75_w_iP(25%)	0.24	0.08	
4	jedit_0.25_w_iP(75%)	0.3	0.11	
4	jedit_0.25_w	0.3	0.11	
4	jedit_0.25_iP(75%)	0.32	0.12	
5	jedit_0.25	0.35	0.05	
5	jedit_0.5_iP(50%)	0.38	0.06	
6	jedit_0.5	0.4	0.15	
6	jedit_0.5_w_iP(50%)	0.4	0.07	
6	jedit_0.5_iP(75%)	0.43	0.15	
6	jedit_0.5_w_iP(75%)	0.44	0.04	
6	jedit_0.5_w	0.46	0.1	
7	jedit_0.75_iP(50%)	0.51	0.09	
7	jedit_0.75_w_iP(50%)	0.52	0.09	
7	jedit_0.75	0.53	0.19	
7	jedit_0.75_iP(75%)	0.54	0.16	
8	jedit_0.75_w_iP(75%)	0.61	0.14	
8	jedit_0.75_w	0.69	0.15	

## log4j

Rank	Treatment	Median	IQR	
1	log4j_Base	0.08	0.04	
2	log4j_0.25_w.iP(25%)	0.17	0.06	
2	log4j_0.25_iP(25%)	0.18	0.07	
3	log4j_0.25_w.iP(75%)	0.22	0.12	
3	log4j_0.25_w.iP(50%)	0.22	0.08	
3	log4j_0.5_iP(25%)	0.23	0.07	
3	log4j_0.25	0.24	0.1	
4	log4j_0.25_iP(75%)	0.25	0.06	
4	log4j_0.75_w.iP(25%)	0.25	0.1	
4	log4j_0.5_w.iP(25%)	0.25	0.08	
4	log4j_0.75_iP(25%)	0.27	0.14	
4	log4j_0.5_iP(50%)	0.28	0.07	
4	log4j_0.25_w	0.28	0.1	
4	log4j_0.5_w.iP(75%)	0.27	0.18	
4	log4j_0.25_iP(50%)	0.28	0.1	
5	log4j_0.5_iP(75%)	0.31	0.14	
5	log4j_0.75_iP(75%)	0.31	0.1	
5	log4j_0.5_w.iP(50%)	0.33	0.04	
5	log4j_0.5_w	0.34	0.2	
5	log4j_0.75_w.iP(50%)	0.34	0.22	
6	log4j_0.5	0.37	0.12	
6	log4j_0.75	0.36	0.22	
6	log4j_0.75_w	0.37	0.13	
6	log4j_0.75_w.iP(75%)	0.38	0.24	
6	log4j_0.75_iP(50%)	0.44	0.14	

## lucene

Rank	Treatment	Median	IQR	
1	lucene.Base	0.07	0.08	●
1	lucene.0.25_w iP(25%)	0.07	0.03	●
1	lucene.0.25_iP(25%)	0.09	0.02	●
2	lucene.0.5_iP(25%)	0.11	0.04	●
2	lucene.0.25_iP(50%)	0.11	0.05	●
2	lucene.0.25_w iP(50%)	0.12	0.07	●
2	lucene.0.5_w iP(25%)	0.13	0.02	●
3	lucene.0.25	0.15	0.1	●
3	lucene.0.25_w iP(75%)	0.14	0.05	●
3	lucene.0.75_iP(25%)	0.16	0.09	●
3	lucene.0.75_w iP(25%)	0.16	0.08	●
3	lucene.0.25_iP(75%)	0.17	0.07	●
4	lucene.0.5_iP(50%)	0.2	0.08	●
4	lucene.0.25_w	0.21	0.06	●
5	lucene.0.5_iP(75%)	0.22	0.08	●
5	lucene.0.5_w	0.24	0.1	●
5	lucene.0.5_w iP(50%)	0.24	0.09	●
6	lucene.0.5_w iP(75%)	0.25	0.06	●
6	lucene.0.75_w iP(50%)	0.25	0.08	●
6	lucene.0.5	0.26	0.1	●
6	lucene.0.75_iP(50%)	0.26	0.09	●
6	lucene.0.75_w iP(75%)	0.28	0.15	●
7	lucene.0.75_iP(75%)	0.32	0.2	●
7	lucene.0.75	0.34	0.11	●
7	lucene.0.75_w	0.39	0.15	●

## pbeans

Rank	Treatment	Median	IQR	
1	pbeans_0.25_iP(25%)	0.0	0.6	
1	pbeans_0.25_w_iP(50%)	0.33	0.4	
1	pbeans_0.25_w_iP(75%)	0.5	0.5	
2	pbeans_0.5_iP(25%)	0.5	0.8	
2	pbeans_0.75_iP(50%)	0.5	0.8	
2	pbeans_0.25_w	0.6	0.62	
2	pbeans_0.25_w_iP(25%)	0.6	0.75	
2	pbeans_0.25	0.67	0.68	
2	pbeans_0.5	0.67	0.6	
2	pbeans_Base	0.6	0.17	
2	pbeans_0.75_w_iP(25%)	0.6	0.47	
2	pbeans_0.75_w_iP(75%)	0.6	0.25	
2	pbeans_0.25_iP(50%)	0.6	0.8	
2	pbeans_0.5_iP(50%)	0.75	0.47	
2	pbeans_0.25_iP(75%)	0.67	1.0	
2	pbeans_0.5_w_iP(50%)	0.67	0.8	
3	pbeans_0.75_w_iP(50%)	0.75	0.4	
3	pbeans_0.5_w	0.8	0.4	
3	pbeans_0.5_iP(75%)	0.8	0.23	
3	pbeans_0.75_iP(25%)	0.8	0.3	
3	pbeans_0.75	0.8	0.4	
3	pbeans_0.5_w_iP(75%)	0.8	0.8	
3	pbeans_0.75_iP(75%)	0.8	0.33	
3	pbeans_0.5_w_iP(25%)	0.88	0.4	
4	pbeans_0.75_w	0.92	0.2	

## poi

Rank	Treatment	Median	IQR	
1	poi_0.25_w.iP(25%)	0.12	0.04	●—
1	poi_0.25_w.iP(50%)	0.14	0.09	—●—
2	poi.Base	0.18	0.16	—●—
2	poi_0.75_w.iP(25%)	0.19	0.13	—●—
2	poi_0.25.iP(50%)	0.2	0.26	—●—
2	poi_0.5_w.iP(25%)	0.21	0.17	—●—
2	poi_0.25.iP(25%)	0.23	0.17	—●—
3	poi_0.5.iP(25%)	0.23	0.13	—●—
3	poi_0.75.iP(50%)	0.26	0.25	—●—
3	poi_0.25_w	0.28	0.14	—●—
3	poi_0.5_w.iP(50%)	0.28	0.1	—●—
3	poi_0.75_w.iP(50%)	0.28	0.16	—●—
3	poi_0.25.iP(75%)	0.28	0.07	—●—
3	poi_0.75.iP(25%)	0.28	0.15	—●—
3	poi_0.5.iP(50%)	0.28	0.17	—●—
3	poi_0.25	0.32	0.26	—●—
3	poi_0.5_w.iP(75%)	0.3	0.21	—●—
3	poi_0.25_w.iP(75%)	0.32	0.17	—●—
4	poi_0.75_w.iP(75%)	0.35	0.26	—●—
4	poi_0.75.iP(75%)	0.35	0.29	—●—
4	poi_0.5.iP(75%)	0.41	0.12	—●—
4	poi_0.5_w	0.44	0.14	—●—
4	poi_0.5	0.52	0.21	—●—
5	poi_0.75_w	0.53	0.23	—●—
5	poi_0.75	0.6	0.29	—●—



## velocity

Rank	Treatment	Median	IQR	
1	velocity_Base	0.01	0.01	●
1	velocity_0.25.iP(25%)	0.03	0.03	●
1	velocity_0.75.iP(25%)	0.04	0.06	●—
1	velocity_0.25.w.iP(25%)	0.03	0.04	●—
1	velocity_0.5.iP(25%)	0.03	0.04	●—
1	velocity_0.5.w.iP(25%)	0.04	0.05	●—
1	velocity_0.75.w.iP(25%)	0.08	0.06	—●
2	velocity_0.25.w.iP(50%)	0.12	0.12	—●—
2	velocity_0.25.iP(50%)	0.16	0.15	—●—
3	velocity_0.25.iP(75%)	0.15	0.05	●—
3	velocity_0.25	0.16	0.04	●—
3	velocity_0.5.iP(50%)	0.16	0.12	—●—
3	velocity_0.25.w.iP(75%)	0.16	0.06	●—
3	velocity_0.5.w.iP(50%)	0.19	0.15	—●—
4	velocity_0.75.w.iP(50%)	0.21	0.06	—●—
4	velocity_0.25.w	0.21	0.06	—●—
4	velocity_0.5.w.iP(75%)	0.21	0.06	—●—
4	velocity_0.75.iP(50%)	0.24	0.13	—●—
5	velocity_0.5.iP(75%)	0.28	0.06	—●—
5	velocity_0.75.iP(75%)	0.28	0.16	—●—
5	velocity_0.5.w	0.31	0.17	—●—
5	velocity_0.75.w.iP(75%)	0.32	0.11	—●—
5	velocity_0.5	0.38	0.26	—●—
6	velocity_0.75.w	0.49	0.1	—●—
6	velocity_0.75	0.53	0.19	—●—

## xalan

Rank	Treatment	Median	IQR	
1	xalan_0.25_iP(25%)	0.11	0.03	●
1	xalan_Base	0.12	0.04	—●
1	xalan_0.25_w_iP(25%)	0.13	0.04	—●
2	xalan_0.5_iP(25%)	0.13	0.03	●
2	xalan_0.25_w_iP(50%)	0.14	0.08	—●—
2	xalan_0.75_w_iP(25%)	0.16	0.08	—●—
2	xalan_0.5_iP(50%)	0.15	0.15	—●—
2	xalan_0.25_iP(50%)	0.16	0.07	—●—
2	xalan_0.5_w_iP(25%)	0.16	0.09	—●—
2	xalan_0.5_w_iP(50%)	0.18	0.14	—●—
2	xalan_0.75_iP(25%)	0.17	0.07	—●—
2	xalan_0.25_iP(75%)	0.17	0.05	●
2	xalan_0.25_w	0.18	0.04	●
3	xalan_0.25_w_iP(75%)	0.2	0.1	—●—
4	xalan_0.25	0.22	0.1	—●—
4	xalan_0.75_iP(50%)	0.22	0.15	—●—
4	xalan_0.75_w_iP(50%)	0.24	0.14	—●—
4	xalan_0.5_w_iP(75%)	0.24	0.12	—●—
4	xalan_0.5_iP(75%)	0.28	0.09	—●—
4	xalan_0.75_iP(75%)	0.28	0.1	—●—
4	xalan_0.5_w	0.3	0.07	—●—
5	xalan_0.75_w_iP(75%)	0.32	0.13	—●—
5	xalan_0.5	0.32	0.13	—●—
5	xalan_0.75	0.4	0.26	—●—
5	xalan_0.75_w	0.43	0.11	—●—

## xerces

Rank	Treatment	Median	IQR	
1	xerces.Base	0.07	0.07	●
2	xerces.0.25_iP(25%)	0.13	0.11	●
2	xerces.0.25_w_iP(25%)	0.16	0.1	●
3	xerces.0.25_w_iP(50%)	0.21	0.14	●
3	xerces.0.5_iP(25%)	0.19	0.09	●
3	xerces.0.25_iP(50%)	0.21	0.13	●
3	xerces.0.5_w_iP(25%)	0.22	0.14	●
3	xerces.0.25_iP(75%)	0.26	0.13	●
3	xerces.0.75_w_iP(25%)	0.26	0.12	●
4	xerces.0.5_w_iP(50%)	0.28	0.14	●
4	xerces.0.75_iP(50%)	0.28	0.21	●
4	xerces.0.25_w	0.28	0.1	●
4	xerces.0.25	0.3	0.16	●
4	xerces.0.25_w_iP(75%)	0.32	0.16	●
4	xerces.0.75_iP(25%)	0.33	0.14	●
4	xerces.0.5_iP(50%)	0.34	0.08	●
4	xerces.0.75_w_iP(50%)	0.35	0.09	●
4	xerces.0.5_w_iP(75%)	0.38	0.17	●
5	xerces.0.5	0.4	0.1	●
5	xerces.0.5_iP(75%)	0.43	0.2	●
5	xerces.0.5_w	0.44	0.14	●
5	xerces.0.75_w_iP(75%)	0.46	0.26	●
5	xerces.0.75_iP(75%)	0.46	0.09	●
6	xerces.0.75_w	0.54	0.13	●
6	xerces.0.75	0.59	0.17	●