Anonymous Author(s)

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$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	SBFL ranking metric	$\overline{\mathcal{R}}_{\lambda}(\Omega)$		max	$\overline{\mathcal{R}}^*_{\lambda}(\Omega)$			max			
ANDERBERG 10077.4 9632.7 9653.0 9811.7 4.4% 597.0 340.7 345.1 413.4 42.9% ARITIMETIC MEAN 14367.6 13507.6 13057.6 11980.3 16.6% 1072.9 811.7 76.5 688.2 35.9% COHEN 14236.9 13460.9 12944.1 1192.6 16.6% 97.1 340.8 345.2 413.4 42.9% DICE 10071.1 9632.5 9651.2 981.3 4.4% 597.1 340.8 345.2 413.4 42.9% EUCLID 23987.3 21911.0 20115.0 1750.3 27.0% 13655.8 858.5 6102.9 4253.7 68.9% GEOMERTIC MEAN 1479.6 13900.1 3201.5 1750.3 27.0% 13655.8 858.5 6102.9 4253.7 68.9% HAMAIN 23987.3 21911.0 20115.0 1750.3 27.0% 13655.8 858.5 6102.9 4253.7 68.9% HAMINIG TC. 93987.3		$\lambda = 1$	$\lambda = 0.98$	$\lambda = 0.9$	$\lambda = 0.5$	improv.	$\lambda = 1$			$\lambda = 0.5$	improv.
ARTTHMETIC MEAN 14367.6 13957.6 13957.6 11980.3 16.6% 1072.9 811.7 756.5 688.2 35.9% COHEN 14236.9 13460.9 12944.1 11926.6 16.2% 986.3 719.5 669.4 649.7 34.1% DICE 10077.1 9632.6 9811.3 4.4% 597.1 340.8 345.2 413.4 42.9% EUCLD 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 4253.7 68.9% GEOMETRIC MEAN 14736.6 13930.0 13328.6 12107.7 17.8% 1238.4 986.4 901.2 759.7 38.4% GODMAN 10096.3 9461.4 9791.6 10011.9 4.3% 889.2 582.9 561.6 619.9 36.8% GP13 10204.9 9761.4 9791.6 10017.9 13655.8 8588.5 6102.9 4253.7 68.9% HAMONIC MEAN 14892.1 14463.0 1217.9 <td>Ample</td> <td>7797.3</td> <td>7766.3</td> <td>7900.8</td> <td>8603.6</td> <td>0.4%</td> <td>1094.8</td> <td>824.0</td> <td>770.1</td> <td>822.5</td> <td>29.7%</td>	Ample	7797.3	7766.3	7900.8	8603.6	0.4%	1094.8	824.0	770.1	822.5	29.7%
COHEN 14236.9 13460.9 12944.1 11926.6 16.2% 986.3 719.5 669.4 649.7 34.1% DICE 10077.1 9632.5 9652.6 9811.3 4.4% 597.1 340.8 345.2 413.4 42.9% EUCLID 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 425.7 68.9% FEISS 20114.6 1842.8 1710.5 14964.4 25.6% 4762.1 332.09 2010.1 84.4 95.0 9812.6 475.7 132.8 986.4 901.2 759.7 38.4% GODMAN 10096.3 964.8 965.7 9812.6 4.5% 702.0 425.9 561.6 619.9 36.8% GDMAN 23987.3 21911.0 20115.0 1750.3 27.0% 13655.8 858.5 6102.9 425.7 68.9% HAMMONC MEAN 14892.1 1406.9.1 1343.0 1217.9 18.2% 126.1 1012.9 <td>Anderberg</td> <td>10077.4</td> <td>9632.7</td> <td>9653.0</td> <td>9811.7</td> <td>4.4%</td> <td>597.0</td> <td>340.7</td> <td>345.1</td> <td>413.4</td> <td>42.9%</td>	Anderberg	10077.4	9632.7	9653.0	9811.7	4.4%	597.0	340.7	345.1	413.4	42.9%
DICE 10077.1 9632.5 9652.6 9811.3 4.4% 597.1 340.8 345.2 413.4 42.9% EUCLID 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 4253.7 66.9% FLEISS 20114.6 18442.8 17101.5 14964.4 25.6% 476.1 3326.9 2601.0 1842.7 61.3% GEOMETRIC MEAN 1473.6 13930.0 13328.6 1210.7 17.78% 1233.8 986.4 901.2 755.7 38.4% GODMAN 10096.3 9644.8 9659.7 9812.6 4.5% 702.0 428.9 354.6 619.9 38.8% GP13 10204.9 976.1.4 9791.6 10011.9 4.3% 889.2 582.9 561.6 619.9 38.8% HAMANN 23987.3 21911.0 20115.0 17503.3 27.0% 1365.8 8588.5 6102.9 4253.7 68.9% JACCARD 10077.2	Arithmetic Mean	14367.6	13597.6	13057.6	11980.3	16.6%	1072.9	811.7	756.5	688.2	35.9%
Euclid 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 4253.7 68.9% FLEISS 20114.6 18442.8 17101.5 14964.4 25.6% 4762.1 3326.9 2601.0 1842.7 61.3% Geomerric Mean 10096.3 9644.8 9557.9 9812.6 4.5% 702.0 428.9 354.6 4143.4 495.5% GP13 10096.3 9644.8 9557.9 9812.6 4.5% 702.0 428.9 354.6 414.3 495.7 GP13 10204.9 9761.4 9791.6 10011.9 4.3% 889.2 582.9 561.6 610.9 4253.7 68.9% HAMMING ETC. 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 858.5 6102.9 4253.7 68.9% JACCARD 10077.2 9632.6 9652.8 9811.4 4.4% 597.0 340.8 345.2 413.4 42.9% Kutczrnskt1	Cohen	14236.9	13460.9	12944.1	11926.6	16.2%	986.3	719.5	669.4	649.7	34.1%
FLEISS20114.618442.817101.514964.425.6%4762.13326.92601.01842.761.3%GEOMETRIC MEAN14736.613930.013328.612107.717.8%1233.8986.4901.2759.738.4%GOODMAN10020.3964.89659.79812.64.5%702.0428.9354.6414.349.5%GP1310204.99761.49791.610011.94.3%889.2582.9561.661.9.936.8%HAMANN23987.321911.020115.017503.327.0%13655.8858.56102.94253.768.9%HARMONIC MEAN14892.114069.113463.01217.718.2%1264.11012.9919.2765.739.4%JACCARD10077.39632.69652.99811.54.4%597.0340.8345.2413.442.9%KULCZYNSK1110073.3973.0976.89971.14.4%746.9461.2446.1513.240.3%M123987.321911.020115.017503.327.0%13655.8858.56102.94253.768.9%M210184.2974.49768.9997.54.4%531.1534.1510.056.8.538.9%M210184.2975.7977.08987.54.4%160.2353.2349.8419.642.7%NAISH2(OP2)1290.71234.81196.71115.113.5%942.5709.4602.4624.3 <td>Dice</td> <td>10077.1</td> <td>9632.5</td> <td>9652.6</td> <td>9811.3</td> <td>4.4%</td> <td>597.1</td> <td>340.8</td> <td>345.2</td> <td>413.4</td> <td>42.9%</td>	Dice	10077.1	9632.5	9652.6	9811.3	4.4%	597.1	340.8	345.2	413.4	42.9%
Geometric Mean 14736.6 13930.0 13328.6 12107.7 17.8% 1233.8 986.4 901.2 759.7 38.4% GODMAN 10096.3 964.8 9659.7 9812.6 4.5% 702.0 428.9 354.6 414.3 49.5% GP13 10204.9 9761.4 9791.6 10011.9 4.3% 889.2 582.9 561.6 619.9 36.8% HAMANN 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 4253.7 68.9% HARMONC MEAN 14892.1 14069.1 1346.0 1217.7 18.2% 1264.1 1012.9 91.2 765.7 39.4% JACCARD 10077.2 9632.6 9652.9 9811.5 4.4% 597.0 340.8 345.0 413.4 42.9% KULCZYNSK11 10077.3 973.6 975.3 27.0% 13655.8 8588.5 6102.9 4253.7 68.9% M1 23987.3 21911.0 <td< td=""><td>Euclid</td><td>23987.3</td><td>21911.0</td><td>20115.0</td><td>17503.3</td><td>27.0%</td><td>13655.8</td><td>8588.5</td><td>6102.9</td><td>4253.7</td><td>68.9%</td></td<>	Euclid	23987.3	21911.0	20115.0	17503.3	27.0%	13655.8	8588.5	6102.9	4253.7	68.9%
GOODMAN10096.39644.89659.79812.64.5%702.0428.9354.6414.349.5%GP1310204.99761.49791.610011.94.3%889.2582.9561.6619.936.8%HAMANN23987.321911.020115.017503.327.0%13655.8858.56102.94253.768.9%HAMMING ETC.23987.321911.020115.017503.327.0%13655.8858.56102.94253.768.9%HARMONIC MEAN14892.114069.113463.012177.9182.5%1264.11012.9919.2765.739.4%JACCARD10077.29632.69652.89811.44.4%597.0340.8345.2413.442.9%KULCZYNSK1110073.39764.89971.14.4%597.0340.8345.2413.442.9%KULCZYNSK1210184.29768.9997.52.7.0%13655.8858.56102.94253.768.9%M123987.321911.020115.017503.327.0%13655.8858.56102.94253.768.9%OCHIA110108.49663.49685.69857.14.4%610.2353.2349.8419.642.7%OCHIA1210200.39751.7977.89918.54.4%789.0447.7449.4521.343.3%NAIS42(OP2)1292.71234.81197.61150.327.0%13655.88588.56102.94253.76	Fleiss	20114.6	18442.8	17101.5	14964.4	25.6%	4762.1	3326.9	2601.0	1842.7	61.3%
GP13 10204.9 9761.4 9791.6 10011.9 4.3% 889.2 582.9 561.6 619.9 36.8% HAMANN 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 4253.7 68.9% HAMMING ETC. 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 4253.7 68.9% HARMONIC MEAN 14892.1 14069.1 13463.0 1217.9 18.2% 1264.1 1012.9 919.2 765.7 39.4% JACCARD 10077.3 9632.6 9652.9 9811.5 4.4% 597.0 340.8 345.0 413.4 42.9% KULCZYNSK1 10073.3 973.0 9764.8 9971.1 4.4% 746.9 461.2 446.1 513.2 40.3% M1 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 4253.7 68.9% M2 10184.2	Geometric Mean	14736.6	13930.0	13328.6	12107.7	17.8%	1233.8	986.4	901.2	759.7	38.4%
HAMANN23987.321911.020115.017503.327.0%13655.8858.56102.94253.768.9%HAMMING ETC.23987.321911.020115.017503.327.0%13655.8858.56102.94253.768.9%HARMONIC MEAN14892.114069.113463.012177.918.2%1264.11012.9919.2765.739.4%JACCARD10077.29632.69652.89811.54.4%597.0340.8345.0413.442.9%KULCZYNSK111007.39632.69652.99811.54.4%597.0340.8345.2413.442.9%KULCZYNSK1210181.39737.09764.89971.14.4%597.0340.8345.2413.442.9%M123987.321911.020115.017503.327.0%13655.8858.56102.94253.768.9%M210184.29740.49768.9997.54.4%610.2353.2349.8419.642.7%OCHIAI10184.8965.4985.69857.14.4%610.2353.2349.8419.642.7%OCHIA110108.49663.49685.69857.14.4%780.0447.7449.4521.343.3%OCHIA210203.3975.1977.08978.54.4%1067.7467.7502.4821.656.2%Rogers & TANIMOTO23987.32191.020115.01750.327.0%13655.8858.56102.9 </td <td>Goodman</td> <td>10096.3</td> <td>9644.8</td> <td>9659.7</td> <td>9812.6</td> <td>4.5%</td> <td>702.0</td> <td>428.9</td> <td>354.6</td> <td>414.3</td> <td>49.5%</td>	Goodman	10096.3	9644.8	9659.7	9812.6	4.5%	702.0	428.9	354.6	414.3	49.5%
HAMMING ETC.23987.321911.020115.017503.327.0%13655.88588.56102.94253.768.9%HARMONIC MEAN14892.114069.113463.012177.918.2%1264.11012.9919.2765.739.4%JACCARD10077.29632.69652.89811.44.4%597.0340.8345.0413.442.9%KULCZYNSKI110077.39632.69652.99811.54.4%597.0340.8345.2413.442.9%KULCZYNSKI210181.39737.09764.89971.14.4%766.9461.2446.1513.240.3%M123987.321911.020115.017503.327.0%13655.88588.56102.94253.768.9%M210184.49663.49685.69857.14.4%610.2353.2349.8419.642.7%OCHIAI10108.49663.49685.69857.14.4%789.0447.7449.4521.343.3%NAISH2(OP2)1290.712349.81197.711155.113.5%942.5709.4602.4624.336.1%OCHIAP10241.89775.4982.010203.44.6%1067.7467.7502.4821.656.2%Rogers d'TANIMOT23987.32191.020115.017503.327.0%13655.8858.56102.94253.768.9%Rogor120004.418364.917057.714937.825.3%4719.33283.7 <td>GP13</td> <td>10204.9</td> <td>9761.4</td> <td>9791.6</td> <td>10011.9</td> <td>4.3%</td> <td>889.2</td> <td>582.9</td> <td>561.6</td> <td>619.9</td> <td>36.8%</td>	GP13	10204.9	9761.4	9791.6	10011.9	4.3%	889.2	582.9	561.6	619.9	36.8%
HARMONIC MEAN14892.114069.113463.012177.918.2%1264.11012.9919.2765.739.4%JACCARD10077.29632.69652.89811.44.4%597.0340.8345.0413.442.9%KULCZYNSKI110077.39632.69652.99811.54.4%597.0340.8345.2413.442.9%KULCZYNSK1210181.3973.09764.89971.14.4%746.9461.2446.1513.240.3%M123987.321911.020115.017503.327.0%13655.8858.56102.94253.768.9%M210184.29740.49768.9997.54.4%610.2353.1510.0568.538.9%OCHIAI10108.4963.49685.69857.14.4%610.2353.2349.8419.642.7%OCHIAI10102.11750.3918.54.4%610.2353.2349.8419.642.7%OCHIAI1020.3975.7970.89918.54.4%190.2447.749.4521.343.3%OCHIAI1020.1975.7971.89918.54.4%106.770.4602.463.666.7%OVERLAP10241.8977.5982.810203.44.6%1067.7467.7502.4821.656.2%Rogors & TANIMOTO23987.321911.020115.01750.327.0%13655.88588.56102.94253.768.9% <t< td=""><td>Hamann</td><td>23987.3</td><td>21911.0</td><td>20115.0</td><td>17503.3</td><td>27.0%</td><td>13655.8</td><td>8588.5</td><td>6102.9</td><td>4253.7</td><td>68.9%</td></t<>	Hamann	23987.3	21911.0	20115.0	17503.3	27.0%	13655.8	8588.5	6102.9	4253.7	68.9%
JACCARD10077.29632.69652.89811.44.4%597.0340.8345.0413.442.9%KULCZYNSKI110077.39632.69652.99811.54.4%597.0340.8345.2413.442.9%KULCZYNSKI210181.39737.09764.89971.14.4%746.9461.2446.1513.240.3%M123987.321911.020115.017503.327.0%13655.88588.56102.94253.768.9%M210184.29740.49768.9997.54.4%610.2353.2349.8419.642.7%OCHIAI10108.4963.4965.69857.14.4%610.2353.2349.8419.642.7%OCHIAI210200.3975.79770.89918.54.4%789.0447.7449.4521.343.3%NAISH2(OP2)12902.712349.811976.711155.113.5%942.5709.4602.4624.336.1%OVERLAP10241.8977.549828.01020.34.6%1067.7467.7502.4821.656.2%Rogor12004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%Rogor214881.414022.51338.91209.118.7%1384.11074.8862.6698.149.6%RusselL&RAO10284.89824.79875.810230.14.5%1198.0627.0646.0897.1 <td< td=""><td>HAMMING ETC.</td><td>23987.3</td><td>21911.0</td><td>20115.0</td><td>17503.3</td><td>27.0%</td><td>13655.8</td><td>8588.5</td><td>6102.9</td><td>4253.7</td><td>68.9%</td></td<>	HAMMING ETC.	23987.3	21911.0	20115.0	17503.3	27.0%	13655.8	8588.5	6102.9	4253.7	68.9%
Kulczynski110077.39632.69652.99811.54.4.%597.0340.8345.2413.442.9%Kulczynski210181.39737.09764.89971.14.4.%746.9461.2446.1513.240.3%M123987.321911.020115.017503.327.0%13655.88588.56102.94253.768.9%M210184.29740.49768.99979.54.4.%835.1534.1510.0568.538.9%OCHIAI10108.49663.49685.69857.14.4.%610.2353.2349.8419.642.7%OCHIAI210200.39751.79770.89918.54.4.%789.0447.7449.4521.343.3%NAISH2 (OP2)12902.712349.811976.711155.113.5%942.5709.4602.4624.336.1%OVERLAP10241.89775.49828.010203.44.6%1067.7467.7502.4821.656.2%Rogers & TANIMOTO23987.321911.020115.017503.327.0%13655.8858.56102.94253.768.9%Rogor120004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%Rogor214881.414022.513386.912096.118.7%1198.0627.0646.0897.147.7%SordT2004.418364.917058.714937.825.3%4719.33283.7 <td< td=""><td>Harmonic Mean</td><td>14892.1</td><td>14069.1</td><td>13463.0</td><td>12177.9</td><td>18.2%</td><td>1264.1</td><td>1012.9</td><td>919.2</td><td>765.7</td><td>39.4%</td></td<>	Harmonic Mean	14892.1	14069.1	13463.0	12177.9	18.2%	1264.1	1012.9	919.2	765.7	39.4%
KULCZYNSK1210181.39737.09764.89971.14.4%746.9461.2446.1513.240.3%M123987.321911.020115.017503.327.0%13655.88588.56102.94253.768.9%M210184.29740.49768.99979.54.4%835.1534.1510.0568.538.9%OCHIAI10108.49663.49685.69857.14.4%610.2353.2349.8419.642.7%OCHIAI210200.39751.79770.89918.54.4%789.0447.7449.4521.343.3%NAISH2(OP2)12902.712349.811976.711155.113.5%942.5709.4602.4624.336.1%OVERLAP10241.89775.4982.010203.44.6%1067.7467.7502.4821.656.2%Rogers & TANIMOTO23987.321911.020115.017503.327.0%13655.88588.56102.94253.768.9%Rogor214881.41402.513386.912096.118.7%1384.11074.8862.6698.149.6%Stort 20004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%Scort 20004.418364.917058.714937.825.3%4719.33283.72561.31805.764.9%Stimple Marching23987.321911.020115.017503.327.0%13655.88588.56102.9<	Jaccard	10077.2	9632.6	9652.8	9811.4	4.4%	597.0	340.8	345.0	413.4	42.9%
M123987.321911.020115.017503.327.0%13655.88588.56102.94253.768.9%M210184.29740.49768.99979.54.4%835.1534.1510.0568.538.9%OCHIAI10108.49663.49685.69857.14.4%610.2353.2349.8419.642.7%OCHIAI21020.39751.79770.89918.54.4%789.0447.7449.4521.343.3%NAISH2(OP2)12902.712349.811976.711155.113.5%942.5709.4602.4624.336.1%OVERLAP10241.89775.49828.010203.44.6%1067.7467.7502.4821.656.2%ROGERS & TANIMOTO23987.321911.020115.017503.327.0%13655.88588.56102.94253.768.9%Rogot 120004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%Rogot 214881.414022.51338.61020.14.5%1198.0627.0646.0897.147.7%Scot T20004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%Simple Marching23987.321911.020115.017503.327.0%1365.8858.56102.94253.768.9%SokAL23987.321911.020115.017503.327.0%1365.8858.5<	Kulczynski1	10077.3	9632.6	9652.9	9811.5	4.4%	597.0	340.8	345.2	413.4	42.9%
M210184.29740.49768.99979.54.4%835.1534.1510.0568.538.9%OCHIAI10108.49663.49685.69857.14.4%610.2353.2349.8419.642.7%OCHIAI210200.39751.79770.89918.54.4%789.0447.7449.4521.343.3%NAISH2(OP2)12902.712349.811976.711155.113.5%942.5709.4602.4624.336.1%OVERLAP10241.89775.4982.01020.44.6%1067.7467.7502.4821.656.2%Rogers & TANIMOTO23987.321911.020115.01750.327.0%13655.8858.56102.94253.768.9%Rogor 120004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%Rogor 214881.41402.51338.6.912096.118.7%1384.11074.8862.6698.149.6%RusselL & RAO10284.89824.7987.810230.14.5%1198.0627.0646.0897.147.7%Scort20004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%Simple Marching2397.32191.020115.01750.327.0%13655.88588.56102.94253.768.9%SokAL23987.32191.020115.01750.327.0%13655.8858.5	Kulczynski2	10181.3	9737.0	9764.8	9971.1	4.4%	746.9	461.2	446.1	513.2	40.3%
OCHIAI10108.49663.49685.69857.14.4%610.2353.2349.8419.642.7%OCHIAI210200.39751.79770.89918.54.4%789.0447.7449.4521.343.3%NAISH2 (OP2)12902.712349.811976.711155.113.5%942.5709.4602.4624.336.1%OVERLAP10241.89775.49828.010203.44.6%1067.7467.7502.4821.656.2%Rogers & TANIMOTO23987.321911.020115.017503.327.0%13655.8858.56102.94253.768.9%Rogor120004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%Rogor214881.41402.51338.912096.118.7%1384.11074.8862.6698.149.6%Russell & Rao10284.89824.79875.810230.14.5%1198.0627.0646.0897.147.7%Scort2004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%Scort2004.418364.917058.714937.825.3%4719.33283.72561.31805.764.9%Scort2004.418364.917058.714937.825.3%4719.33283.72561.31805.768.9%SokAl23987.32191.020115.017503.327.0%13655.8858	M1	23987.3	21911.0	20115.0	17503.3	27.0%	13655.8	8588.5	6102.9	4253.7	68.9%
OCHIAI210200.39751.79770.89918.54.4%789.0447.7449.4521.343.3%NAISH2 (OP2)12902.712349.811976.711155.113.5%942.5709.4602.4624.336.1%OVERLAP10241.89775.49828.010203.44.6%1067.7467.7502.4821.656.2%RoGERS & TANIMOTO23987.321911.020115.017503.327.0%13655.8858.56102.94253.768.9%RoGOT120004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%RoGOT214881.41402.51338.912096.118.7%1384.11074.8862.6698.149.6%RUSSELL & RAO10284.89824.79875.810230.14.5%1198.0627.0646.0897.147.7%SCOTT2004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%SIMPLE MATCHING23987.32191.020115.017503.327.0%13655.8858.56102.94253.768.9%SOKAL23987.32191.020115.017503.327.0%13655.8858.56102.94253.768.9%SØRENSEN-DICE10077.39632.69652.89811.54.4%597.0340.8345.1413.442.9%MONG110284.89824.79875.810230.14.5%1198	M2	10184.2	9740.4	9768.9	9979.5	4.4%	835.1	534.1	510.0	568.5	38.9%
NAISH2 (OP2)12902.712349.811976.711155.113.5%942.5709.4602.4624.336.1%OVERLAP10241.89775.49828.010203.44.6%1067.7467.7502.4821.656.2%ROGERS & TANIMOTO23987.321911.020115.017503.327.0%13655.8858.56102.94253.768.9%ROGOT120004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%ROGOT214881.41402.51338.912096.118.7%1384.11074.8862.6698.149.6%RUSSELL & RAO10284.89824.79875.810230.14.5%1198.0627.0646.0897.147.7%SCOTT2004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%SIMPLE MATCHING23987.32191.020115.017503.327.0%13655.8858.56102.94253.768.9%SOKAL23987.32191.020115.017503.327.0%13655.8858.56102.94253.768.9%SØRENSEN-DICE10077.39632.69652.89811.54.4%597.0340.8345.1413.442.9%TARANTULA10064.69620.19639.19796.24.4%585.7335.4338.8405.942.7%WONG110284.89824.79875.810230.14.5%11	Ochiai	10108.4	9663.4	9685.6	9857.1	4.4%	610.2	353.2	349.8	419.6	42.7%
OVERLAP10241.89775.49828.010203.44.6%1067.7467.7502.4821.656.2%ROGERS & TANIMOTO23987.321911.020115.017503.327.0%13655.88588.56102.94253.768.9%ROGOT120004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%ROGOT214881.414022.513386.912096.118.7%1384.11074.8862.6698.149.6%RUSSELL & RAO10284.89824.79875.810230.14.5%1198.0627.0646.0897.147.7%SCOTT20004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%SIMPLE MATCHING23987.321911.020115.017503.327.0%13655.88588.56102.94253.768.9%SOKAL23987.321911.020115.017503.327.0%13655.8858.56102.94253.768.9%SØRENSEN-DICE10077.39632.69652.89811.54.4%597.0340.8345.1413.442.9%TARANTULA10064.69620.19639.19796.24.4%585.7335.4338.8405.942.7%WONG110284.89824.79875.810230.14.5%1198.0627.0646.0897.147.7%WONG320455.718165.11706.51579.922.8%103	Ochiai2	10200.3	9751.7	9770.8	9918.5	4.4%	789.0	447.7	449.4	521.3	43.3%
Rogers & TANIMOTO23987.321911.020115.017503.327.0%13655.88588.56102.94253.768.9%Rogor120004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%Rogor214881.414022.513386.912096.118.7%1384.11074.8862.6698.149.6%Russell & Rao10284.89824.79875.810230.14.5%1198.0627.0646.0897.147.7%Scort20004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%Simple Matching23987.321911.020115.017503.327.0%13655.88588.56102.94253.768.9%SokAl23987.321911.020115.017503.327.0%13655.8858.56102.94253.768.9%Sørensen-Dice10077.39632.69652.89811.54.4%597.0340.8345.1413.442.9%TarAntrula10064.69620.19639.19796.24.4%585.7335.4338.8405.942.7%Wong110284.89824.79875.810230.14.5%1198.0627.0646.0897.147.7%Wong320455.718165.11707.51579.922.8%10350.5505.8395.413435.966.8%Wong223987.32191.020115.017503.327.0% <td< td=""><td>Naish2 (Op2)</td><td>12902.7</td><td>12349.8</td><td>11976.7</td><td>11155.1</td><td>13.5%</td><td>942.5</td><td>709.4</td><td>602.4</td><td>624.3</td><td>36.1%</td></td<>	Naish2 (Op2)	12902.7	12349.8	11976.7	11155.1	13.5%	942.5	709.4	602.4	624.3	36.1%
Rogor120004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%Rogor214881.414022.513386.912096.118.7%1384.11074.8862.6698.149.6%Russell&Rac10284.89824.79875.810230.14.5%1198.0627.0646.0897.147.7%Scort20004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%Simple Matching23987.321911.020115.017503.327.0%13655.8858.56102.94253.768.9%Sokal23987.321911.020115.017503.327.0%13655.8858.56102.94253.768.9%Sokal23987.32191.020115.017503.327.0%13655.8858.56102.94253.768.9%Sokal10077.39632.69652.89811.54.4%597.0340.8345.1413.442.9%Tarantula10064.69620.19639.19796.24.4%585.7335.4338.8405.942.7%WonG110284.89824.79875.810230.14.5%1198.0627.0646.0897.147.7%WonG320455.718165.11707.51579.922.8%10350.5505.83954.13435.966.8%WonG223987.32191.020115.017503.327.0%13655.88585.5 <td>Overlap</td> <td>10241.8</td> <td>9775.4</td> <td>9828.0</td> <td>10203.4</td> <td>4.6%</td> <td>1067.7</td> <td>467.7</td> <td>502.4</td> <td>821.6</td> <td>56.2%</td>	Overlap	10241.8	9775.4	9828.0	10203.4	4.6%	1067.7	467.7	502.4	821.6	56.2%
Rogor214881.414022.513386.912096.118.7%1384.11074.8862.6698.149.6%RUSSELL&RAO10284.89824.79875.810230.14.5%1198.0627.0646.0897.147.7%Scort20004.418364.917058.714937.825.3%4719.33283.72561.31805.761.7%Simple Marching23987.321911.020115.017503.327.0%13655.88588.56102.94253.768.9%Sokal23987.321911.020115.017503.327.0%13655.88588.56102.94253.768.9%Sokal10077.39632.69652.89811.54.4%597.0340.8345.1413.442.9%Tarantula10064.69620.19639.19796.24.4%585.7335.4338.8405.942.7%Wong110284.89824.79875.810230.14.5%1198.0627.0646.0897.147.7%Wong223987.32191.020115.017503.327.0%13655.8335.4338.8405.942.7%Wong223987.32191.020115.01579.922.8%10350.55056.83954.13435.966.8%Wong223987.32191.020115.017503.327.0%13655.88585.56102.94253.768.9%	Rogers & Tanimoto	23987.3	21911.0	20115.0	17503.3	27.0%	13655.8	8588.5	6102.9	4253.7	68.9%
RUSSELL & RAO 10284.8 9824.7 9875.8 10230.1 4.5% 1198.0 627.0 646.0 897.1 47.7% SCOTT 20004.4 18364.9 17058.7 14937.8 25.3% 4719.3 3283.7 2561.3 1805.7 61.7% SIMPLE MATCHING 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 4253.7 68.9% SOKAL 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 4253.7 68.9% SØRENSEN-DICE 10077.3 9632.6 9652.8 9811.5 4.4% 597.0 340.8 345.1 413.4 42.9% TARANTULA 10064.6 9620.1 9639.1 9796.2 4.4% 585.7 335.4 338.8 405.9 42.7% WONG1 10284.8 9824.7 9875.8 10230.1 4.5% 1198.0 627.0 646.0 897.1 47.7% WONG3 20455.7<	Rogot1	20004.4	18364.9	17058.7	14937.8	25.3%	4719.3	3283.7	2561.3	1805.7	61.7%
Scott 20004.4 18364.9 17058.7 14937.8 25.3% 4719.3 3283.7 2561.3 1805.7 61.7% SIMPLE MATCHING 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 4253.7 68.9% Sokal 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 858.5 6102.9 4253.7 68.9% Sokal 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 858.5 6102.9 4253.7 68.9% Sørensen-Dice 10077.3 9632.6 9652.8 9811.5 4.4% 597.0 340.8 345.1 413.4 42.9% TarantulA 10064.6 9620.1 9639.1 9796.2 4.4% 585.7 335.4 338.8 405.9 42.7% Wong1 10284.8 9824.7 9875.8 10230.1 4.5% 1198.0 627.0 646.0 897.1 47.7% Wong3 20455.7 <td>Rogot2</td> <td>14881.4</td> <td>14022.5</td> <td>13386.9</td> <td>12096.1</td> <td>18.7%</td> <td>1384.1</td> <td>1074.8</td> <td>862.6</td> <td>698.1</td> <td>49.6%</td>	Rogot2	14881.4	14022.5	13386.9	12096.1	18.7%	1384.1	1074.8	862.6	698.1	49.6%
SIMPLE MATCHING 23987.3 2191.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 4253.7 68.9% SOKAL 23987.3 2191.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 4253.7 68.9% SØRAL 23987.3 2191.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 4253.7 68.9% SØRENSEN-DICE 10077.3 9632.6 9652.8 9811.5 4.4% 597.0 340.8 345.1 413.4 42.9% TARANTULA 10064.6 9620.1 9639.1 9796.2 4.4% 585.7 335.4 338.8 405.9 42.7% Wong1 10284.8 9824.7 9875.8 10230.1 4.5% 1198.0 627.0 646.0 897.1 47.7% Wong3 20455.7 18165.1 1707.65 1579.9 22.8% 10350.5 5056.8 3954.1 3435.9 66.8% Wong2 23987.3	Russell ở Rao	10284.8	9824.7	9875.8	10230.1	4.5%	1198.0	627.0	646.0	897.1	47.7%
SOKAL 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 4253.7 68.9% SØRENSEN-DICE 10077.3 9632.6 9652.8 9811.5 4.4% 597.0 340.8 345.1 413.4 42.9% TARANTULA 10064.6 9620.1 9639.1 9796.2 4.4% 585.7 335.4 338.8 405.9 42.7% Wong1 10284.8 9824.7 9875.8 10230.1 4.5% 1198.0 627.0 646.0 897.1 47.7% Wong3 20455.7 18165.1 1707.65 1579.9 22.8% 10350.5 5056.8 3954.1 3435.9 66.8% Wong2 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 4253.7 68.9%	Scott	20004.4	18364.9	17058.7	14937.8	25.3%	4719.3	3283.7	2561.3	1805.7	61.7%
Sørensen-Dice 10077.3 9632.6 9852.8 9811.5 4.4% 597.0 340.8 345.1 413.4 42.9% TARANTULA 10064.6 9620.1 9639.1 9796.2 4.4% 585.7 335.4 338.8 405.9 42.7% Wong1 10284.8 9824.7 9875.8 10230.1 4.5% 1198.0 627.0 646.0 897.1 47.7% Wong3 20455.7 18165.1 1707.65 1579.9 22.8% 10350.5 5056.8 3954.1 3435.9 66.8% Wong2 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 8585.5 6102.9 4253.7 68.9%	SIMPLE MATCHING	23987.3	21911.0	20115.0	17503.3	27.0%	13655.8	8588.5	6102.9	4253.7	68.9%
TARANTULA 10064.6 9620.1 9639.1 9796.2 4.4% 585.7 335.4 338.8 405.9 42.7% Wong1 10284.8 9824.7 9875.8 10230.1 4.5% 1198.0 627.0 646.0 897.1 47.7% Wong3 20455.7 18165.1 17076.5 15799.9 22.8% 10350.5 5056.8 3954.1 3435.9 66.8% Wong2 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 4253.7 68.9%	Sokal	23987.3	21911.0	20115.0	17503.3	27.0%	13655.8	8588.5	6102.9	4253.7	68.9%
Wong1 10284.8 9824.7 9875.8 10230.1 4.5% 1198.0 627.0 646.0 897.1 47.7% Wong3 20455.7 18165.1 17076.5 15799.9 22.8% 10350.5 5056.8 3954.1 3435.9 66.8% Wong2 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 4253.7 68.9%	Sørensen-Dice	10077.3	9632.6	9652.8	9811.5	4.4%	597.0	340.8	345.1	413.4	42.9%
Wong3 20455.7 18165.1 17076.5 15799.9 22.8% 10350.5 5056.8 3954.1 3435.9 66.8% Wong2 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 4253.7 68.9%	TARANTULA	10064.6	9620.1	9639.1	9796.2	4.4%	585.7	335.4	338.8	405.9	42.7%
Wong2 23987.3 21911.0 20115.0 17503.3 27.0% 13655.8 8588.5 6102.9 4253.7 68.9%	Wong1	10284.8	9824.7	9875.8	10230.1	4.5%	1198.0	627.0	646.0	897.1	47.7%
	Wong3	20455.7	18165.1	17076.5	15799.9	22.8%	10350.5	5056.8	3954.1	3435.9	66.8%
ZOLTAR 11980.9 11213.8 11222.9 11292.0 6.4% 1575.2 606.0 608.9 655.8 61.5%	Wong2	23987.3	21911.0	20115.0	17503.3	27.0%	13655.8	8588.5	6102.9	4253.7	68.9%
	Zoltar	11980.9	11213.8	11222.9	11292.0	6.4%	1575.2	606.0	608.9	655.8	61.5%

TABLE 1: OVERVIEW OF ALL EXAMINED SBFL METRICS WITH $\overline{\mathcal{R}}_{\lambda}(\Omega)$ and $\overline{\mathcal{R}}_{\lambda}^{*}(\Omega)$ for $\lambda \in \{1.0, 0.98, 0.9, 0.5\}$ and the maximum improvements for the highest values with regard to $\lambda = 1$. Highest rankings are printed with a bold font for each set of values.

ISSTA, 2017, Santa Barbara

SBFL ranking metric	$\widetilde{\mathcal{R}}_{\lambda}(\Omega)$		max	max $\widetilde{\mathcal{R}}_1^*(\Omega)$				max		
	$\lambda = 1$	$\lambda = 0.98$	$\lambda = 0.9$	$\lambda = 0.5$	improv.	$\lambda = 1$	$\lambda = 0.98^{1}$	$\lambda = 0.9$	$\lambda = 0.5$	improv.
Ample	2843.0	2796.0	2978.0	3874.0	1.7%	42.0	43.0	44.0	75.0	0.0%
Anderberg	5321.0	3428.0	3360.0	4382.0	36.9%	27.0	23.0	26.0	40.0	14.8%
Arithmetic Mean	11064.0	8591.0	6714.0	5572.0	49.6%	27.0	26.0	28.0	41.0	3.7%
Cohen	11064.0	8412.0	6702.0	5546.0	49.9%	27.0	26.0	28.0	41.0	3.7%
Dice	5324.0	3428.0	3360.0	4382.0	36.9%	27.0	23.0	26.0	40.0	14.8%
Euclid	24776.0	22947.0	19705.0	15753.0	36.4%	9683.0	1162.0	1049.0	856.0	91.2%
Fleiss	21118.0	18014.0	15229.0	11293.0	46.5%	40.0	39.0	42.0	68.0	2.5%
Geometric Mean	11081.0	8653.0	6846.0	5590.0	49.6%	29.0	27.0	30.0	46.0	6.9%
Goodman	5324.0	3428.0	3360.0	4382.0	36.9%	27.0	23.0	26.0	40.0	14.8%
GP13	5286.0	3863.0	4063.0	5167.0	26.9%	33.0	31.0	34.0	55.0	6.1%
Hamann	24776.0	22947.0	19705.0	15753.0	36.4%	9683.0	1162.0	1049.0	856.0	91.2%
Hamming etc.	24776.0	22947.0	19705.0	15753.0	36.4%	9683.0	1162.0	1049.0	856.0	91.2%
Harmonic Mean	11426.0	8818.0	7057.0	5590.0	51.1%	27.0	26.0	27.0	45.0	3.7%
Jaccard	5320.0	3428.0	3360.0	4382.0	36.8%	27.0	23.0	26.0	40.0	14.8%
Kulczynski1	5325.0	3428.0	3360.0	4382.0	36.9%	27.0	23.0	26.0	40.0	14.8%
Kulczynski2	5274.0	3900.0	4079.0	4973.0	26.1%	26.0	22.0	23.0	40.0	15.4%
M1	24776.0	22947.0	19705.0	15753.0	36.4%	9683.0	1162.0	1049.0	856.0	91.2%
M2	5286.0	3865.0	4062.0	5070.0	26.9%	34.0	32.0	34.0	58.0	5.9%
Ochiai	5453.0	3718.0	3690.0	4575.0	32.3%	28.0	26.0	27.0	43.0	7.1%
Ochiai2	5922.0	3593.0	3690.0	4482.0	39.3%	29.0	27.0	30.0	45.0	6.9%
Naish2 (Op2)	5630.0	4484.0	4321.0	5079.0	23.3%	33.0	31.0	34.0	55.0	6.1%
Overlap	5224.0	3697.0	3906.0	5285.0	29.2%	168.0	49.0	79.0	161.0	70.8%
Rogers & Tanimoto	24776.0	22947.0	19705.0	15753.0	36.4%	9683.0	1162.0	1049.0	856.0	91.2%
Rogot1	21118.0	17871.0	15195.0	11296.0	46.5%	33.0	31.0	33.0	55.0	6.1%
Rogot2	11686.0	8628.0	6707.0	5365.0	54.1%	27.0	25.0	25.0	44.0	7.4%
Russell & Rao	5307.0	3969.0	4203.0	5434.0	25.2%	203.0	63.0	88.0	189.0	69.0%
Scott	21118.0	17871.0	15195.0	11296.0	46.5%	33.0	31.0	33.0	55.0	6.1%
SIMPLE MATCHING	24776.0	22947.0	19705.0	15753.0	36.4%	9683.0	1162.0	1049.0	856.0	91.2%
Sokal	24776.0	22947.0	19705.0	15753.0	36.4%	9683.0	1162.0	1049.0	856.0	91.2%
Sørensen-Dice	5324.0	3428.0	3360.0	4382.0	36.9%	27.0	23.0	26.0	40.0	14.8%
TARANTULA	5321.0	3423.0	3352.0	4198.0	37.0%	29.0	25.0	26.0	45.0	13.8%
Wong1	5307.0	3969.0	4203.0	5434.0	25.2%	203.0	63.0	88.0	189.0	69.0%
Wong3	20454.0	16794.0	15619.0	13717.0	32.9%	6199.0	549.0	443.0	443.0	92.9%
Wong2	24776.0	22947.0	19705.0	15753.0	36.4%	9683.0	1162.0	1049.0	856.0	91.2%
Zoltar	18042.0	7397.0	7397.0	7403.0	59.0%	27.0	23.0	24.0	41.0	14.8%

Table 2: Overview of *all* examined SBFL metrics with $\widetilde{\mathcal{R}}_{\lambda}(\Omega)$ and $\widetilde{\mathcal{R}}_{\lambda}^{*}(\Omega)$ for $\lambda \in \{1.0, 0.98, 0.9, 0.5\}$ and the maximum improvements for the highest values with regard to $\lambda = 1$. Highest rankings are printed with a bold font for each set of values.

[~ —	~SBFL —SBFL	$\sim IM = IM$
SBFL ranking metric	$\lambda_p, (\lambda_p), [\min, \max]$	$\widetilde{RI}_{\overline{\mathcal{R}}}^{SBFL}, (\overline{RI}_{\overline{\mathcal{R}}}^{SBFL}), [\min, \max]$	$\widetilde{RI}_{\overline{\mathcal{R}}}^{LM}, (\overline{RI}_{\overline{\mathcal{R}}}^{LM}), [\min, \max]$
Ample	0.98, (0.98), [0.98,0.98]	0.3%, (-0.4%), [-8.8%,4.1%]	58.3%, (56.8%), [34.7%,78.2%]
Anderberg	0.98, (0.98), [0.98,0.98]	4.3%, (2.9%), [-10.1%,17.1%]	50.2%, (48.7%), [16.4%,70.4%]
Arithmetic Mean	0.17, (0.18), [0.16,0.22]	18.6%, (18.6%), [3.8%,32.7%]	40.6%, (36.2%), [5.1%,51.5%]
Cohen	0.16, (0.17), [0.16,0.22]	18.3%, (16.5%), [-0.8%,32.7%]	40.4%, (36.3%), [5.1%,51.7%]
Dice	0.98, (0.98), [0.98,0.98]	4.3%, (2.9%), [-10.1%,17.1%]	50.2%, (48.7%), [16.4%,70.4%]
Euclid	0.02, (0.02), [0.02,0.02]	37.7%, (36.1%), [17.9%,44.5%]	4.2%, (4.4%), [-0.3%,9.7%]
Fleiss	0.06, (0.07), [0.06,0.1]	34.5%, (32.3%), [11.4%,43.1%]	23.6%, (21.0%), [-1.3%,41.1%]
Geometric Mean	0.14, (0.16), [0.14,0.2]	20.7%, (20.6%), [7.2%,32.2%]	40.2%, (35.5%), [5.2%,51.1%]
Goodman	0.98, (0.98), [0.98,0.98]	4.3%, (3.1%), [-10.1%,17.1%]	50.2%, (48.6%), [16.4%,70.4%]
GP13	0.98, (0.98), [0.98,0.98]	4.1%, (2.8%), [-10.0%,16.3%]	48.7%, (47.5%), [16.5%,70.1%]
Hamann	0.02, (0.02), [0.02,0.02]	37.7%, (36.1%), [17.9%,44.5%]	4.2%, (4.4%), [-0.3%,9.7%]
HAMMING ETC.	0.02, (0.02), [0.02,0.02]	37.7%, (36.1%), [17.9%,44.5%]	4.2%, (4.4%), [-0.3%,9.7%]
Harmonic Mean	0.14, (0.15), [0.14,0.2]	21.0%, (21.1%), [6.8%,32.1%]	40.3%, (35.3%), [4.8%,51.1%]
JACCARD	0.98, (0.98), [0.98,0.98]	4.3%, (2.9%), [-10.1%,17.1%]	50.2%, (48.7%), [16.4%,70.4%]
Kulczynski1	0.98, (0.98), [0.98,0.98]	4.3%, (2.9%), [-10.1%,17.1%]	50.2%, (48.7%), [16.4%,70.4%]
Kulczynski2	0.98, (0.98), [0.98,0.98]	4.2%, (2.8%), [-10.0%,16.4%]	49.0%, (47.8%), [16.5%,70.4%]
M1	0.02, (0.02), [0.02,0.02]	37.7%, (36.1%), [17.9%,44.5%]	4.2%, (4.4%), [-0.3%,9.7%]
M2	0.98, (0.98), [0.98,0.98]	4.2%, (2.8%), [-10.0%,16.4%]	48.8%, (47.7%), [16.5%,70.1%]
Ochiai	0.98, (0.98), [0.98,0.98]	4.3%, (2.9%), [-10.1%,17.0%]	49.8%, (48.5%), [16.4%,70.4%]
Ochiai2	0.98, (0.98), [0.98,0.98]	4.0%, (2.9%), [-10.1%,17.1%]	50.2%, (47.6%), [16.0%,68.8%]
Naish2 (Op2)	0.28, (0.3), [0.22,0.44]	8.7%, (9.0%), [-7.0%,21.2%]	41.2%, (39.1%), [4.2%,59.2%]
Overlap	0.98, (0.98), [0.98,0.98]	4.3%, (3.2%), [-9.4%,17.1%]	48.8%, (47.3%), [16.7%,69.8%]
Rogers & Tanimoto	0.02, (0.02), [0.02,0.02]	37.7%, (36.1%), [17.9%,44.5%]	4.2%, (4.4%), [-0.3%,9.7%]
Rogot1	0.06, (0.06), [0.06,0.08]	34.1%, (32.4%), [12.7%,43.5%]	24.3%, (21.6%), [-0.4%,41.8%]
Rogot2	0.14, (0.15), [0.14,0.2]	23.3%, (22.1%), [7.6%,30.1%]	41.9%, (35.8%), [4.8%,51.1%]
Russell ở Rao	0.98, (0.98), [0.98,0.98]	4.3%, (3.0%), [-9.4%,16.7%]	48.3%, (46.9%), [16.6%,69.3%]
Scott	0.06, (0.06), [0.06,0.08]	34.1%, (32.4%), [12.7%,43.5%]	24.3%, (21.6%), [-0.4%,41.8%]
SIMPLE MATCHING	0.02, (0.02), [0.02,0.02]	37.7%, (36.1%), [17.9%,44.5%]	4.2%, (4.4%), [-0.3%,9.7%]
Sokal	0.02, (0.02), [0.02,0.02]	37.7%, (36.1%), [17.9%,44.5%]	4.2%, (4.4%), [-0.3%,9.7%]
Sørensen-Dice	0.98, (0.98), [0.98,0.98]	4.3%, (2.9%), [-10.1%,17.1%]	50.2%, (48.7%), [16.4%,70.4%]
Tarantula	0.98, (0.98), [0.98,0.98]	4.3%, (2.9%), [-10.1%,17.1%]	50.3%, (48.9%), [16.4%,70.5%]
Wong1	0.98, (0.98), [0.98,0.98]	4.3%, (3.0%), [-9.4%,16.7%]	48.3%, (46.9%), [16.6%,69.3%]
Wong3	0.06, (0.06), [0.04,0.08]	28.0%, (25.6%), [11.2%,34.9%]	8.4%, (9.4%), [-1.0%,26.2%]
Wong2	0.02, (0.02), [0.02,0.02]	37.7%, (36.1%), [17.9%,44.5%]	4.2%, (4.4%), [-0.3%,9.7%]
Zoltar	0.98, (0.98), [0.98,0.98]	6.3%, (6.2%), [-8.7%,20.4%]	43.7%, (38.8%), [4.8%,61.8%]
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Table 3: Results of the 10-fold cross validation of $\overline{\mathcal{R}}_{\lambda_p}(\Omega).$

ISSTA, 2017, Santa Barbara

SBFL ranking metric	$\widetilde{\lambda_{n}}, (\overline{\lambda_{n}}), [\min, \max]$	$\widetilde{RI}_{\overline{R}*}^{SBFL}, (\overline{RI}_{\overline{R}*}^{SBFL}), [min, max]$	$\widetilde{RI}_{\overline{R}*}^{LM}$, $(\overline{RI}_{\overline{R}*}^{LM})$, [min, max]
Ample	0.76, (0.8), [0.76,0.9]	24.2%, (25.9%), [0.1%, 50.5%]	85.2%, (83.8%), [63.4%,95.7%]
Anderberg	0.98, (0.97), [0.88,0.98]	31.6%, (31.0%), [1.8%,57.4%]	93.2%, (92.8%), [88.0%,97.2%]
Arithmetic Mean	0.58, (0.58), [0.52,0.62]	36.9%, (29.7%), [-51.5%,65.5%]	88.2%, (85.6%), [64.4%,94.1%]
Cohen	0.58, (0.62), [0.58,0.76]	33.0%, (23.6%), [-51.9%,65.4%]	87.8%, (86.2%), [67.4%,94.1%]
DICE	0.98, (0.97), [0.88,0.98]	31.6%, (31.0%), [1.8%,57.4%]	93.2%, (92.8%), [88.0%,97.2%]
Euclid	0.06, (0.07), [0.06,0.08]	70.4%, (71.4%), [58.0%,81.7%]	21.1%, (19.7%), [1.4%,34.4%]
Fleiss	0.24, (0.24), [0.22,0.26]	68.2%, (63.0%), [20.2%,82.9%]	68.1%, (65.4%), [27.8%,82.7%]
Geometric Mean	0.42, (0.43), [0.42,0.48]	39.9%, (31.3%), [-71.8%,64.0%]	87.2%, (84.1%), [53.3%,93.3%]
Goodman	0.88, (0.88), [0.86,0.92]	42.3%, (32.3%), [-9.6%,69.5%]	93.2%, (92.4%), [86.0%,96.9%]
GP13	0.78, (0.79), [0.78,0.86]	41.0%, (32.9%), [5.1%,51.7%]	88.5%, (88.2%), [81.4%,93.7%]
Hamann	0.06, (0.07), [0.06,0.08]	70.4%, (71.4%), [58.0%,81.7%]	21.1%, (19.7%), [1.4%,34.4%]
HAMMING ETC.	0.06, (0.07), [0.06,0.08]	70.4%, (71.4%), [58.0%,81.7%]	21.1%, (19.7%), [1.4%,34.4%]
Harmonic Mean	0.44, (0.44), [0.44,0.48]	41.1%, (34.6%), [-51.0%,66.2%]	87.7%, (84.2%), [51.5%,94.0%]
Jaccard	0.98, (0.97), [0.88,0.98]	31.6%, (31.0%), [1.8%,57.4%]	93.2%, (92.8%), [88.0%,97.2%]
Kulczynski1	0.98, (0.97), [0.88,0.98]	31.6%, (31.0%), [1.8%,57.4%]	93.2%, (92.8%), [88.0%,97.2%]
Kulczynski2	0.88, (0.87), [0.8,0.9]	44.7%, (34.1%), [-16.6%,56.6%]	90.5%, (90.6%), [83.4%,96.7%]
M1	0.06, (0.07), [0.06,0.08]	70.4%, (71.4%), [58.0%,81.7%]	21.1%, (19.7%), [1.4%,34.4%]
M2	0.81, (0.82), [0.78,0.88]	42.2%, (34.3%), [2.6%,53.5%]	89.6%, (89.3%), [81.2%,94.6%]
Ochiai	0.88, (0.9), [0.88,0.98]	30.3%, (28.3%), [-7.8%,56.7%]	92.7%, (92.4%), [87.2%,97.5%]
Ochiai2	0.98, (0.97), [0.88,0.98]	39.1%, (33.8%), [0.8%,59.9%]	91.8%, (90.7%), [81.9%,96.3%]
NAISH2 (Op2)	0.78, (0.78), [0.76,0.8]	32.0%, (33.6%), [4.2%,66.7%]	88.8%, (88.1%), [81.1%,93.6%]
Overlap	0.98, (0.98), [0.98,0.98]	56.8%, (56.7%), [45.5%,69.2%]	91.1%, (90.3%), [85.0%,94.3%]
Rogers & Tanimoto	0.06, (0.07), [0.06,0.08]	70.4%, (71.4%), [58.0%,81.7%]	21.1%, (19.7%), [1.4%,34.4%]
Rogot1	0.18, (0.19), [0.18,0.24]	67.8%, (63.2%), [21.3%,83.0%]	68.5%, (66.0%), [32.0%,83.2%]
Rogot2	0.44, (0.44), [0.44,0.48]	49.2%, (43.0%), [-51.0%,75.3%]	88.3%, (85.4%), [51.4%,93.9%]
Russell & Rao	0.98, (0.98), [0.98,0.98]	45.2%, (46.6%), [36.7%,55.8%]	86.4%, (86.8%), [84.0%,90.6%]
Scott	0.18, (0.19), [0.18,0.24]	67.8%, (63.2%), [21.3%,83.0%]	68.5%, (66.0%), [32.0%,83.2%]
SIMPLE MATCHING	0.06, (0.07), [0.06,0.08]	70.4%, (71.4%), [58.0%,81.7%]	21.1%, (19.7%), [1.4%,34.4%]
Sokal	0.06, (0.07), [0.06,0.08]	70.4%, (71.4%), [58.0%,81.7%]	21.1%, (19.7%), [1.4%,34.4%]
Sørensen-Dice	0.98, (0.97), [0.88,0.98]	31.6%, (31.0%), [1.8%,57.4%]	93.2%, (92.8%), [88.0%,97.2%]
TARANTULA	0.98, (0.97), [0.88,0.98]	31.6%, (31.0%), [3.5%,59.0%]	93.3%, (92.9%), [87.8%,97.2%]
Wong1	0.98, (0.98), [0.98,0.98]	45.2%, (46.6%), [36.7%,55.8%]	86.4%, (86.8%), [84.0%,90.6%]
Wong3	0.4, (0.38), [0.26,0.4]	64.5%, (66.7%), [51.2%,80.2%]	27.7%, (27.9%), [-1.4%,50.4%]
Wong2	0.06, (0.07), [0.06,0.08]	70.4%, (71.4%), [58.0%,81.7%]	21.1%, (19.7%), [1.4%,34.4%]
Zoltar	0.94, (0.95), [0.94,0.98]	60.7%, (57.3%), [23.7%,84.1%]	89.0%, (87.7%), [66.9%,97.2%]

Table 4: Results of the 10-fold cross validation of $\overline{\mathcal{R}}^*_{\lambda p}(\Omega).$

AMPLE 0.97, (0.97), (0.94, 1.0] -0.1%, (0.9%), [-11.3%, 23.2%] 85.7%, (78.9%), [47.4%, 97.6%] ANDERBERG 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%, 35.1%] 92.1%, (77.9%), [29.3%, 98.0%] ARITHMETIC MEAN 0.43, (0.54), [0.42,0.92] -33.9%, (-36.3%), [-13.9%, (-36.9%)] 83.6%, (66.3%), [-5.5%, 96.1%] DICE 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%, 35.1%] 92.1%, (77.9%), [29.3%, 96.1%] DICE 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%, 35.1%] 92.1%, (77.9%), [29.3%, 96.1%] EUCLID 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (6.6%), [-1.6%, 15.4%] FLEISS 0.2, (0.21), [0.1,0.3] 56.3%, (54.7%), [29.4%, 75.6%] 39.5%, (40.8%), [-4.6%, 83.2%] GODMAN 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%, 35.1%] 92.1%, (77.9%), [29.3%, 98.0%] GP13 0.98, (0.97), [0.94,0.98] 0.0%, (4.3%), [30.2%, 62.4%] 81.7%, (6.6%), [-1.6%, 15.4%] HAMANN 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 81.7%, (6.6%), [-1.6%, 15.4%] HAMINO ETC. 0.04, (0.07), [0.20,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 83.7%, (64.7%), [-9.3%, 97.8%] M1 <t< th=""><th> ·</th><th></th><th>$\widetilde{RI}_{\widetilde{\varrho}}^{SBFL}, (\overline{RI}_{\widetilde{\varrho}}^{SBFL}), [\min, \max]$</th><th>$\simeq LM$ $= LM$ $= 1$</th></t<>	·		$\widetilde{RI}_{\widetilde{\varrho}}^{SBFL}, (\overline{RI}_{\widetilde{\varrho}}^{SBFL}), [\min, \max]$	$\simeq LM$ $= LM$ $= 1$
ANDERBERG 0.98, (0.97), (0.94, 0.93) 3.7%, (10.5%), [-4.6%, 35.1%) 92.1%, (77.9%), [29.3%, 98.0%] ARITIMETIC MEAN 0.43, (0.54), [0.42,0.92] -33.9%, (-36.3%), [-139.4%, 59.8%] 83.9%, (66.3%), [-5.5%, 96.1%] COHEN 0.46, (0.56), [0.42,0.92] -37.7%, (-34.6%), [-139.4%, 59.8%] 83.9%, (66.3%), [-5.5%, 96.1%] DICE 0.98, (0.97), [0.940.98] 3.7%, (10.5%), [-4.6%, 35.1%] 92.1%, (77.9%), [29.3%, 98.0%] EUCLID 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 81.%, (6.6%), [-1.6%, 15.4%] FLEISS 0.2, (0.21), [0.10,3] 56.3%, (54.7%), [29.4%, 75.6%] 39.5%, (40.8%), [-4.6%, 35.1%] 92.1%, (77.9%), [29.3%, 98.0%] GODMAN 0.98, (0.97), [0.940.98] 3.7%, (10.5%), [-4.6%, 35.1%] 81.3%, (6.6%), [-1.6%, 15.4%] HAMANN 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 81.7%, (6.6%), [-1.6%, 15.4%] HAMMING ETC. 0.04, (0.07), [0.20,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 81.7%, (6.6%), [-1.6%, 15.4%] HAMMING ETC. 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 81.7%, (6.6%), [-1.6%, 15.4%] HAMMING ETC. 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 81.7%, (6.6%), [-1.	SBFL ranking metric	$\lambda_p, (\lambda_p), [\min, \max]$		$\widetilde{RI}_{\widetilde{\mathcal{R}}}^{LM}, (\overline{RI}_{\widetilde{\mathcal{R}}}^{LM}), [\min, \max]$
ARTTHMETIC MEAN 0.43, (0.54), [0.42,0.92] -33.9%, (-36.3%), [-139.4%, 59.8%] 83.9%, (66.3%), [-5.5%, 96.1%] COHEN 0.46, (0.56), [0.42,0.92] -37.7%, (-34.6%), [-139.6%, 60.9%] 83.6%, (66.1%), [-5.5%, 96.1%] DICE 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%, 35.1%] 92.1%, (77.9%), [29.3%, 98.0%] EUCLID 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (6.6%), [-1.6%, 15.4%] FEISS 0.2, (0.21), [0.1,0.3] 56.3%, (54.7%), [29.4%, 75.6%] 39.5%, (40.8%), [-4.6%, 35.2%] GEOMETRIC MEAN 0.43, (0.52), [0.4,0.9] -28.2%, (-33.2%), [-134.6%, 60.9%] 84.3%, (66.1%), [-5.6%, 95.6%] GOODMAN 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%, 35.1%] 92.1%, (77.9%), [29.3%, 98.0%] GP13 0.98, (0.97), [0.94,0.98] 52.4%, (48.0%), [30.2%, 62.4%] 8.1.%, (6.6%), [-1.6%, 15.4%] HAMMNN 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1.%, (6.6%), [-1.6%, 15.4%] HARMONIC MEAN 0.42, (0.52), [0.38.0.9] -37.0%, (-30.6%), [-138.8%, 60.3%] 83.7%, (64.7%), [-9.4%, 95.9%] JACCARD 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%, 35.1%] 92.1%, (77.9%), [29.3%, 98.0%] <t< td=""><td></td><td></td><td></td><td></td></t<>				
COHEN 0.46, (0.56), [0.42,0.92] -37.7%, (-34.6%), [-139.6%, 60.9%] 83.6%, (66.1%), [-5.5%, 96.1%] DICE 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%, 35.1%] 92.1%, (77.9%), [29.3%, 98.0%] EUCLID 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (66.5%), [-1.6%, 15.4%] FLEISS 0.2, (0.21), [0.4,0.9] -28.2%, (-33.2%), [-134.6%, 60.9%] 84.3%, (66.1%), [-5.6%, 95.6%] GOODMAN 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%, 35.1%] 92.1%, (77.9%), [29.3%, 98.0%] GP13 0.98, (0.97), [0.94,0.98] 0.0%, (8.4%), [-8.1%, 35.1%] 81.3%, (72.3%), [29.3%, 97.7%] HAMANN 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (6.6%), [-1.6%, 15.4%] HAMONIC MEAN 0.42, (0.52), [0.38,0.9] -37.0%, (-30.6%), [-138.8%, 60.3%] 83.7%, (64.7%), [-9.4%, 95.9%] JACCARD 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%, 35.1%] 92.1%, (77.9%), [29.3%, 98.0%] KULCZYNSK11 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%, 35.1%] 92.1%, (77.9%), [29.3%, 98.0%] KULCZYNSK12 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%, 35.1%] 92.1%, (77.9%), [29.3%, 97.8%] M1				
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EUCLID 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] FLEISS 0.2, (0.21), [0.1,0.3] 56.3%, (54.7%), [29.4%,75.6%] 39.5%, (40.8%), [-4.6%,83.2%] GEOMETRIC MEAN 0.43, (0.52), [0.4,0.9] -28.2%, (-33.2%), [-134.6%,60.9%] 84.3%, (66.1%), [-5.6%,95.6%] GOODMAN 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,97.7%] HAMANN 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] HAMANN 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] HARMONIC MEAN 0.42, (0.52), [0.38,0.9] -37.0%, (-30.6%), [-138.8%,00.3%] 83.7%, (04.7%), [-9.4%,95.9%] JACCARD 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,97.8%] M1 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] M2 0.98, (0.97), [0.94,0.98] 1.3%, (6.3%,5.1%] 81.7%, (73.4%), [29.3%,97.8%] M1 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] M2 0.98, (0.98), [0.94,0.98] <	Cohen	0.46, (0.56), [0.42,0.92]	-37.7%, (-34.6%), [-139.6%,60.9%]	83.6%, (66.1%), [-5.5%,96.1%]
FLEISS 0.2, (0.21), [0.1,0.3] 56.3%, (54.7%), [29.4%,75.6%] 39.5%, (40.8%), [-4.6%,83.2%] GEOMETRIC MEAN 0.43, (0.52), [0.4,0.9] -28.2%, (-33.2%), [-134.6%,60.9%] 84.3%, (66.1%), [-5.6%,95.6%] GOODMAN 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] GP13 0.98, (0.97), [0.94,0.98] 0.0%, (8.4%), [-8.1%,35.1%] 81.3%, (72.3%), [29.3%,97.7%] HAMANN 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] HAMMING ETC. 0.04, (0.07), [0.94,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] HARMONIC MEAN 0.42, (0.52), [0.38,0.9] -37.0%, (-30.6%), [-138.8%,60.3%] 83.7%, (64.7%), [29.3%,98.0%] Kulczynski1 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] Kulczynski2 0.98, (0.97), [0.94,0.98] 1.3%, (8.6%), [-6.3%,35.1%] 81.7%, (6.6%), [-1.6%,15.4%] M2 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-5.4%,35.1%] 81.3%, (73.0%), [29.3%,97.8%] M1 0.04, (0.07), [0.20,0.18] 52.4%, (48.0%), [30.2%,62.4%] 81.7%, (6.6%), [-1.6%,15.4%] M2 0.98, (0.99),	Dice		3.7%, (10.5%), [-4.6%,35.1%]	92.1%, (77.9%), [29.3%,98.0%]
GEOMETRIC MEAN 0.43, (0.52), [0.4,0.9] -28.2%, (-33.2%), [-134.6%,60.9%] 84.3%, (66.1%), [-5.6%,95.6%] GODDMAN 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,97.7%] HAMANN 0.04, (0.07), [0.94,0.98] 0.0%, (8.4%), [-8.1%,35.1%] 81.3%, (72.3%), [29.3%,97.7%] HAMANN 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] HAMMING ETC. 0.04, (0.07), [0.92,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] JACCARD 0.88, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] KULCZYNSK11 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,97.8%] M1 0.04, (0.07), [0.92,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1.7%, (73.4%), [29.3%,97.8%] M2 0.98, (0.97), [0.94,0.98] 1.3%, (8.6%), [-6.3%,35.1%] 81.3%, (73.0%), [29.3%,97.8%] OCHIA1 0.98, (0.97), [0.94,0.98] 1.2%, (4.80%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] M2 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-54.%,35.1%] 91.7%, (76.7%), [29.3%,97.9%] OCHIA1 0.98, (0.98), [0.94,0.9	Euclid	0.04, (0.07), [0.02,0.18]	52.4%, (48.0%), [30.2%,62.4%]	8.1%, (6.6%), [-1.6%,15.4%]
GOODMAN 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] GP13 0.98, (0.97), [0.94,0.98] 0.0%, (8.4%), [-8.1%,35.1%] 81.3%, (72.3%), [29.3%,98.0%] HAMANN 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] HAMMING ETC. 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] HARMONIC MEAN 0.42, (0.52), [0.38,0.9] -37.0%, (-30.6%), [-138.8%,60.3%] 83.7%, (64.7%), [-9.4%,95.9%] JACCARD 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,97.8%] Kulczynski1 0.98, (0.97), [0.94,0.98] 1.3%, (8.6%), [-6.3%,35.1%] 92.1%, (77.9%), [29.3%,97.8%] M1 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] M2 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-5.4%,35.1%] 81.3%, (73.0%), [29.3%,97.9%] Ochitai 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-5.4%,35.1%] 81.3%, (6.33%, [-5.7%,97.2%] Ochitai 0.98, (0.93), [0.94,0.98] 1.7%, (9.6%), [-5.4%,35.1%] 80.2%, (63.3%), [-5.4%,97.9%] Ochitai 0.98, (0.94), [0.94,0.	FLEISS	0.2, (0.21), [0.1,0.3]	56.3%, (54.7%), [29.4%,75.6%]	39.5%, (40.8%), [-4.6%,83.2%]
GP13 0.98, (0.97), [0.94,0.98] 0.0%, (8.4%), [-8.1%, 35.1%] 81.3%, (72.3%), [29.3%, 97.7%] HAMANN 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (6.6%), [-1.6%, 15.4%] HAMMING ETC. 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (6.6%), [-1.6%, 15.4%] HARMONIC MEAN 0.42, (0.52), [0.38,0.9] -37.0%, (-30.6%), [-138.8%, 60.3%] 83.7%, (64.7%), [-9.4%, 95.9%] JACCARD 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%, 35.1%] 92.1%, (77.9%), [29.3%, 98.0%] Kulczynski1 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%, 35.1%] 92.1%, (77.9%), [29.3%, 98.0%] Kulczynski2 0.98, (0.97), [0.94,0.98] 1.3%, (8.6%), [-6.3%, 35.1%] 92.1%, (77.9%), [29.3%, 97.8%] M1 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (6.6%), [-1.6%, 15.4%] M2 0.98, (0.98), [0.98,0.98] 2.2%, (9.4%), [-5.4%, 35.1%] 81.3%, (73.0%), [29.3%, 97.9%] Ochiat 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-5.0%, 35.1%] 91.7%, (76.7%), [29.3%, 97.9%] Ochiat2 0.98, (0.94), [0.94,0.98] 1.7%, (9.6%), [-5.4%, 35.1%] 81.3%, (6.6%), [-1.6%, 15.4%] OvertIAP	GEOMETRIC MEAN	0.43, (0.52), [0.4,0.9]	-28.2%, (-33.2%), [-134.6%,60.9%]	84.3%, (66.1%), [-5.6%,95.6%]
HAMANN 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] HAMMING ETC. 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] HARMONIC MEAN 0.42, (0.52), [0.38,0.9] -37.0%, (-30.6%), [-138.8%,60.3%] 83.7%, (64.7%), [-9.4%,95.9%] JACCARD 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] KULCZYNSK11 0.98, (0.97), [0.94,0.98] 1.3%, (8.6%), [-6.3%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] KULCZYNSK12 0.98, (0.97), [0.94,0.98] 1.3%, (8.6%), [-6.3%,35.1%] 92.1%, (77.9%), [29.3%,97.8%] M1 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1.7%, (73.6%), [29.3%,97.8%] M2 0.98, (0.98), [0.94,0.98] 1.7%, (9.6%), [-5.0%,35.1%] 81.3%, (73.0%), [29.3%,97.8%] OCHIAI 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-5.0%,35.1%] 81.3%, (73.0%), [29.3%,97.9%] OCHIAI 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-5.4%,35.1%] 81.3%, (26.3%), [-5.7%,97.2%] OVERLAP 0.88, (0.82), [0.66,0.94] -6.4%, (12.9%), [-5.4%,35.1%] 80.2%, (63.3%), [-5.7%,97.2%] OVERIAP 0.98, (0.98)	Goodman	0.98, (0.97), [0.94,0.98]	3.7%, (10.5%), [-4.6%,35.1%]	92.1%, (77.9%), [29.3%,98.0%]
HAMMING ETC. 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] HARMONIC MEAN 0.42, (0.52), [0.38,0.9] -37.0%, (-30.6%), [-138.8%,60.3%] 83.7%, (64.7%), [-9.4%,95.9%] JACCARD 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] KULCZYNSK11 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] KULCZYNSK12 0.98, (0.97), [0.94,0.98] 1.3%, (8.6%), [-6.3%,35.1%] 81.7%, (73.4%), [29.3%,97.8%] M1 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] M2 0.98, (0.98), [0.98,0.98] 2.2%, (9.4%), [-5.4%,35.1%] 81.3%, (73.0%), [29.3%,97.8%] OCHIAI 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-5.0%,35.1%] 91.7%, (76.7%), [29.3%,97.9%] OLHAI 0.98, (0.97), [0.94,0.98] 4.1%, (10.1%), [0.7%,34.9%] 92.0%, (77.1%), [28.2%,97.9%] OLHAI 0.98, (0.97), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 81.4%, (72.6%), [29.3%,97.7%] OVERLAP 0.98, (0.98), [0.94,0.98] 9.9%, (15.2%), [-54.5%,14.6%] 80.2%, (6.77,1%), [28.2%,97.9%] OVERLAP 0.98, (0.98)	GP13	0.98, (0.97), [0.94,0.98]	0.0%, (8.4%), [-8.1%,35.1%]	81.3%, (72.3%), [29.3%,97.7%]
HARMONIC MEAN 0.42, (0.52), [0.38,0.9] -37.0%, (-30.6%), [-138.8%,60.3%] 83.7%, (64.7%), [-9.4%,95.9%] JACCARD 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] KULCZYNSK11 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] KULCZYNSK12 0.98, (0.97), [0.94,0.98] 1.3%, (8.6%), [-6.3%,35.1%] 81.7%, (73.4%), [29.3%,97.8%] M1 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] M2 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-5.0%,35.1%] 91.7%, (76.7%), [29.3%,97.9%] OCHIAI 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-5.0%,35.1%] 91.7%, (76.7%), [29.3%,97.9%] OCHIAI 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-5.0%,35.1%] 91.7%, (76.7%), [29.3%,97.9%] OCHIAI 0.98, (0.97), [0.86,0.98] 4.1%, (10.1%), [0.7%,34.9%] 92.0%, (77.1%), [28.2%,97.9%] NAISH2 (OP2) 0.8, (0.82), [0.66,0.94] -6.4%, (-12.9%), [-54.5%,31.6%] 80.2%, (63.3%), [-5.7%,97.2%] OVERLAP 0.98, (0.98), [0.94,0.98] 9.9%, (15.2%), [-0.4%,35.1%] 84.4%, (72.6%), [-3.8%,62.0%] ROGGRS & TANIMOTO 0.	Hamann	0.04, (0.07), [0.02,0.18]	52.4%, (48.0%), [30.2%,62.4%]	8.1%, (6.6%), [-1.6%,15.4%]
JACCARD 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] KULCZYNSK11 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] KULCZYNSK12 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] M1 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] M2 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-5.0%,35.1%] 91.7%, (76.7%), [29.3%,97.9%] OCHIAI 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-5.0%,35.1%] 91.7%, (76.7%), [29.3%,97.9%] OCHIAI2 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-5.0%,35.1%] 91.7%, (76.7%), [29.3%,97.9%] OCHIAI2 0.98, (0.97), [0.86,0.98] 4.1%, (10.1%), [0.7%,34.9%] 92.0%, (77.1%), [28.2%,97.9%] NAISH2 (OP2) 0.8, (0.82), [0.66,0.94] -6.4%, (-6.2%, (-12.9%), [-54.5%,14.6%] 80.2%, (63.3%), [-5.7%,97.2%] OVERLAP 0.98, (0.98), [0.94,0.98] 9.9%, (15.2%), [-0.4%,35.1%] 84.4%, (72.6%), [29.3%,92.7%] Rogor1 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%,75.3%] 42.3%, (42.4%), [-4.5%,87.6%] Rogor2 0.42, (0.52), [HAMMING ETC.	0.04, (0.07), [0.02,0.18]	52.4%, (48.0%), [30.2%,62.4%]	8.1%, (6.6%), [-1.6%,15.4%]
Kulczynski1 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] Kulczynski2 0.98, (0.97), [0.94,0.98] 1.3%, (8.6%), [-6.3%,35.1%] 81.7%, (73.4%), [29.3%,97.8%] M1 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] M2 0.98, (0.98), [0.98,0.98] 2.2%, (9.4%), [-5.4%,35.1%] 81.3%, (73.0%), [29.3%,97.8%] OCHIAI 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-5.0%,35.1%] 91.7%, (76.7%), [29.3%,97.9%] OCHIAI2 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-5.0%,35.1%] 91.7%, (76.7%), [29.3%,97.9%] OCHIAI2 0.98, (0.97), [0.86,0.98] 4.1%, (10.1%), [0.7%,34.9%] 92.0%, (77.1%), [28.2%,97.9%] NAISH2 (OP2) 0.8, (0.82), [0.66,0.94] -6.4%, (-12.9%), [-54.5%,14.6%] 80.2%, (63.3%), [-5.7%,97.2%] OVERLAP 0.98, (0.98), [0.94,0.98] 9.9%, (15.2%), [-0.4%,35.1%] 84.4%, (72.6%), [29.3%,92.7%] Rogor1 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%,75.3%] 42.3%, (42.4%), [-4.5%,87.6%] Rogor2 0.42, (0.52), [0.4,0.94] -57.0%, (-48.6%), [-138.8%,62.0%] 84.4%, (64.3%), [-1.4%,94.9%] Stort 0.2, (0.21), [0.1,0.3]	HARMONIC MEAN	0.42, (0.52), [0.38,0.9]	-37.0%, (-30.6%), [-138.8%,60.3%]	83.7%, (64.7%), [-9.4%,95.9%]
Kulczynski2 0.98, (0.97), [0.94,0.98] 1.3%, (8.6%), [-6.3%, 35.1%] 81.7%, (73.4%), [29.3%, 97.8%] M1 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (6.6%), [-1.6%, 15.4%] M2 0.98, (0.98), [0.98,0.98] 2.2%, (9.4%), [-5.4%, 35.1%] 81.3%, (73.0%), [29.3%, 97.8%] OCHIAI 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-5.0%, 35.1%] 91.7%, (76.7%), [29.3%, 97.9%] OCHIAI2 0.98, (0.97), [0.86,0.98] 4.1%, (10.1%), [0.7%, 34.9%] 92.0%, (77.1%), [28.2%, 97.9%] NAISH2 (OP2) 0.8, (0.82), [0.66,0.94] -6.4%, (-12.9%), [-54.5%, 14.6%] 80.2%, (63.3%), [-5.7%, 97.2%] OVERLAP 0.98, (0.98), [0.94,0.98] 9.9%, (15.2%), [-0.4%, 35.1%] 84.4%, (72.6%), [29.3%, 92.7%] Rogor1 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%, 75.3%] 42.3%, (42.4%), [-4.5%, 87.6%] Rogor2 0.42, (0.52), [0.4,0.94] -57.0%, (-48.6%), [-138.8%, 62.0%] 84.4%, (64.3%), [-12.4%, 94.9%] Scort 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%, 75.3%] 42.3%, (42.4%), [-4.5%, 87.6%] Scort 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%, 75.3%] 42.3%, (42.4%), [-4.5%, 87.6%] Simple Marching	JACCARD	0.98, (0.97), [0.94,0.98]	3.7%, (10.5%), [-4.6%,35.1%]	92.1%, (77.9%), [29.3%,98.0%]
M1 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] M2 0.98, (0.98), [0.98,0.98] 2.2%, (9.4%), [-5.4%,35.1%] 81.3%, (73.0%), [29.3%,97.8%] OCHIAI 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-5.0%,35.1%] 91.7%, (76.7%), [29.3%,97.9%] OCHIAI2 0.98, (0.97), [0.86,0.98] 4.1%, (10.1%), [0.7%,34.9%] 92.0%, (77.1%), [28.2%,97.9%] NAISH2 (OP2) 0.8, (0.82), [0.66,0.94] -6.4%, (-12.9%), [-54.5%,14.6%] 80.2%, (63.3%), [-5.7%,97.2%] OVERLAP 0.98, (0.98), [0.94,0.98] 9.9%, (15.2%), [-0.4%,35.1%] 84.4%, (72.6%), [29.3%,92.7%] ROGET1 0.2, (0.21), [0.10,3] 60.5%, (56.8%), [29.6%,75.3%] 42.3%, (42.4%), [-4.5%,87.6%] ROGOT2 0.42, (0.52), [0.4,0.94] -57.0%, (-48.6%), [-138.8%,62.0%] 84.4%, (64.3%), [-12.4%,94.9%] RUSSELL & RAO 0.98, (0.98), [0.94,0.98] 12.3%, (11.5%), [-24.0%,35.1%] 79.8%, (70.7%), [29.3%,92.2%] SCOTT 0.2, (0.21), [0.10,3] 60.5%, (56.8%), [29.6%,75.3%] 42.3%, (42.4%), [-4.5%,87.6%] SIMPLE MATCHING 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] SØRENSEN-DICE 0.98, (0.9	Kulczynski1		3.7%, (10.5%), [-4.6%,35.1%]	92.1%, (77.9%), [29.3%,98.0%]
M2 0.98, (0.98), [0.98,0.98] 2.2%, (9.4%), [-5.4%,35.1%] 81.3%, (73.0%), [29.3%,97.8%] OCHIAI 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-5.0%,35.1%] 91.7%, (76.7%), [29.3%,97.9%] OCHIAI2 0.98, (0.97), [0.86,0.98] 4.1%, (10.1%), [0.7%,34.9%] 92.0%, (77.1%), [28.2%,97.9%] NAISH2 (OP2) 0.8, (0.82), [0.66,0.94] -6.4%, (-12.9%), [-54.5%,14.6%] 80.2%, (63.3%), [-5.7%,97.2%] OVERLAP 0.98, (0.98), [0.94,0.98] 9.9%, (15.2%), [-0.4%,35.1%] 84.4%, (72.6%), [29.3%,92.7%] Rogers & TANIMOTO 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] Rogor1 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%,75.3%] 42.3%, (42.4%), [-4.5%,87.6%] RusselL & RAO 0.98, (0.98), [0.94,0.98] 12.3%, (11.5%), [-24.0%,35.1%] 79.8%, (70.7%), [29.3%,92.2%] Scort 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%,75.3%] 42.3%, (42.4%), [-4.5%,87.6%] StMPLE MATCHING 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] SoKAL 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] SoKAL 0.04, (0	Kulczynski2	0.98, (0.97), [0.94,0.98]	1.3%, (8.6%), [-6.3%,35.1%]	81.7%, (73.4%), [29.3%,97.8%]
OCHIAI 0.98, (0.97), [0.94,0.98] 1.7%, (9.6%), [-5.0%,35.1%] 91.7%, (76.7%), [29.3%,97.9%] OCHIAI2 0.98, (0.97), [0.86,0.98] 4.1%, (10.1%), [0.7%,34.9%] 92.0%, (77.1%), [28.2%,97.9%] NAISH2 (OP2) 0.8, (0.82), [0.66,0.94] -6.4%, (-12.9%), [-54.5%,14.6%] 80.2%, (63.3%), [-5.7%,97.2%] OVERLAP 0.98, (0.98), [0.94,0.98] 9.9%, (15.2%), [-0.4%,35.1%] 84.4%, (72.6%), [29.3%,92.7%] ROGERS & TANIMOTO 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] ROGOT1 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%,75.3%] 42.3%, (42.4%), [-4.5%,87.6%] RUSSELL & RAO 0.98, (0.98), [0.94,0.98] 12.3%, (11.5%), [-24.0%,35.1%] 79.8%, (70.7%), [29.3%,92.2%] SCOTT 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%,75.3%] 42.3%, (42.4%), [-4.5%,87.6%] SCOTT 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%,75.3%] 42.3%, (42.4%), [-4.5%,87.6%] StMPLE MATCHING 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] SoKAL 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] SoKAL 0.04,	M1	0.04, (0.07), [0.02,0.18]	52.4%, (48.0%), [30.2%,62.4%]	8.1%, (6.6%), [-1.6%,15.4%]
OCHIAI2 0.98, (0.97), [0.86,0.98] 4.1%, (10.1%), [0.7%, 34.9%] 92.0%, (77.1%), [28.2%, 97.9%] NAISH2 (OP2) 0.8, (0.82), [0.66,0.94] -6.4%, (-12.9%), [-54.5%, 14.6%] 80.2%, (63.3%), [-5.7%, 97.2%] OVERLAP 0.98, (0.98), [0.94,0.98] 9.9%, (15.2%), [-0.4%, 35.1%] 84.4%, (72.6%), [29.3%, 92.7%] ROGERS & TANIMOTO 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (6.6%), [-1.6%, 15.4%] ROGOT1 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%, 75.3%] 42.3%, (42.4%), [-4.5%, 87.6%] ROGOT2 0.42, (0.52), [0.4,0.94] -57.0%, (-48.6%), [-138.8%, 62.0%] 84.4%, (64.3%), [-12.4%, 94.9%] RUSSELL & RAO 0.98, (0.98), [0.94,0.98] 12.3%, (11.5%), [-24.0%, 35.1%] 79.8%, (70.7%), [29.3%, 92.2%] SCOTT 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%, 75.3%] 42.3%, (42.4%), [-4.5%, 87.6%] SIMPLE MATCHING 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (6.6%), [-1.6%, 15.4%] SOKAL 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (6.6%), [-1.6%, 15.4%] SØRENSEN-DICE 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%, 35.1%] 92.1%, (77.9%), [29.3%, 98.0%]	M2	0.98, (0.98), [0.98,0.98]	2.2%, (9.4%), [-5.4%,35.1%]	81.3%, (73.0%), [29.3%,97.8%]
NAISH2 (OP2) 0.8, (0.82), [0.66,0.94] -6.4%, (-12.9%), [-54.5%, 14.6%] 80.2%, (63.3%), [-5.7%, 97.2%] OVERLAP 0.98, (0.98), [0.94,0.98] 9.9%, (15.2%), [-0.4%, 35.1%] 84.4%, (72.6%), [29.3%, 92.7%] RogERS & TANIMOTO 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (6.6%), [-1.6%, 15.4%] RogOT1 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%, 75.3%] 42.3%, (42.4%), [-4.5%, 87.6%] RogOT2 0.42, (0.52), [0.4,0.94] -57.0%, (-48.6%), [-138.8%, 62.0%] 84.4%, (64.3%), [-12.4%, 94.9%] RUSSELL & RAO 0.98, (0.98), [0.94,0.98] 12.3%, (11.5%), [-24.0%, 35.1%] 79.8%, (70.7%), [29.3%, 92.2%] SCOTT 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%, 75.3%] 42.3%, (42.4%), [-4.5%, 87.6%] SIMPLE MATCHING 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (6.6%), [-1.6%, 15.4%] SOKAL 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (6.6%), [-1.6%, 15.4%] SØRENSEN-DICE 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%, 35.1%] 92.1%, (77.9%), [29.3%, 98.0%] TARANTULA 0.97, (0.97), [0.94,0.98] 1.9%, (11.7%), [-2.7%, 35.1%] 91.5%, (78.5%), [29.3%, 98.8.3%] <tr< td=""><td>Осніаі</td><td>0.98, (0.97), [0.94,0.98]</td><td>1.7%, (9.6%), [-5.0%,35.1%]</td><td>91.7%, (76.7%), [29.3%,97.9%]</td></tr<>	Осніаі	0.98, (0.97), [0.94,0.98]	1.7%, (9.6%), [-5.0%,35.1%]	91.7%, (76.7%), [29.3%,97.9%]
OVERLAP 0.98, (0.98), [0.94,0.98] 9.9%, (15.2%), [-0.4%,35.1%] 84.4%, (72.6%), [29.3%,92.7%] ROGERS & TANIMOTO 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] ROGOT1 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%,75.3%] 42.3%, (42.4%), [-4.5%,87.6%] ROGOT2 0.42, (0.52), [0.4,0.94] -57.0%, (-48.6%), [-138.8%,62.0%] 84.4%, (64.3%), [-12.4%,94.9%] RUSSELL & RAO 0.98, (0.98), [0.94,0.98] 12.3%, (11.5%), [-24.0%,35.1%] 79.8%, (70.7%), [29.3%,92.2%] SCOTT 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%,75.3%] 42.3%, (42.4%), [-4.5%,87.6%] SIMPLE MATCHING 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] SOKAL 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] SØRENSEN-DICE 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] TARANTULA 0.97, (0.97), [0.94,0.98] 1.9%, (11.7%), [-2.7%,35.1%] 91.5%, (78.5%), [29.3%,98.3%] WONG1 0.98, (0.98), [0.94,0.98] 1.23%, (11.5%), [-24.0%,35.1%] 79.8%, (70.7%), [29.3%,98.2%] WONG3	Ochiai2	0.98, (0.97), [0.86,0.98]	4.1%, (10.1%), [0.7%,34.9%]	92.0%, (77.1%), [28.2%,97.9%]
Rogers & TANIMOTO 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] Rogor1 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%,75.3%] 42.3%, (42.4%), [-4.5%,87.6%] Rogor2 0.42, (0.52), [0.4,0.94] -57.0%, (-48.6%), [-138.8%,62.0%] 84.4%, (64.3%), [-12.4%,94.9%] Russell & RAO 0.98, (0.98), [0.94,0.98] 12.3%, (11.5%), [-24.0%,35.1%] 79.8%, (70.7%), [29.3%,92.2%] Scort 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%,75.3%] 42.3%, (42.4%), [-4.5%,87.6%] Simple Matching 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] Sokal 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] Sokal 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] Sokal 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] Sokal 0.04, (0.07), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] TARANTULA 0.97, (0.97), [0.94,0.98] 1.9%, (11.7%), [-2.7%,35.1%] 91.5%, (78.5%), [29.3%,98.8%] WonG3 0.2, (0.	NAISH2 (Op2)	0.8, (0.82), [0.66,0.94]	-6.4%, (-12.9%), [-54.5%,14.6%]	80.2%, (63.3%), [-5.7%,97.2%]
Rogot1 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%,75.3%] 42.3%, (42.4%), [-4.5%,87.6%] Rogot2 0.42, (0.52), [0.4,0.94] -57.0%, (-48.6%), [-138.8%,62.0%] 84.4%, (64.3%), [-12.4%,94.9%] Russell & Rao 0.98, (0.98), [0.94,0.98] 12.3%, (11.5%), [-24.0%,35.1%] 79.8%, (70.7%), [29.3%,92.2%] Scott 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%,75.3%] 42.3%, (42.4%), [-4.5%,87.6%] Simple Matching 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] Sokal 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] Sørensen-Dice 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] TARANTULA 0.97, (0.97), [0.94,0.98] 1.9%, (11.7%), [-2.7%,35.1%] 91.5%, (78.5%), [29.3%,98.3%] Wong3 0.2, (0.2), [0.16,0.22] 40.1%, (42.4%), [22.3%,65.0%] 15.6%, (17.4%), [-0.2%,53.1%] Wong2 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%]	Overlap	0.98, (0.98), [0.94,0.98]	9.9%, (15.2%), [-0.4%,35.1%]	84.4%, (72.6%), [29.3%,92.7%]
Rogot2 0.42, (0.52), [0.4,0.94] -57.0%, (-48.6%), [-138.8%, 62.0%] 84.4%, (64.3%), [-12.4%, 94.9%] Russell & Rao 0.98, (0.98), [0.94,0.98] 12.3%, (11.5%), [-24.0%, 35.1%] 79.8%, (70.7%), [29.3%, 92.2%] Scott 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%, 75.3%] 42.3%, (42.4%), [-4.5%, 87.6%] Simple Matching 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (6.6%), [-1.6%, 15.4%] Sokal 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (6.6%), [-1.6%, 15.4%] Sokal 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (6.6%), [-1.6%, 15.4%] Sokal 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (6.6%), [-1.6%, 15.4%] Sokal 0.04, (0.07), [0.94,0.98] 1.7%, (10.5%), [-4.6%, 35.1%] 92.1%, (77.9%), [29.3%, 98.0%] TARANTULA 0.97, (0.97), [0.94,0.98] 1.9%, (11.7%), [-2.7%, 35.1%] 91.5%, (78.5%), [29.3%, 98.8%] WonG1 0.98, (0.98), [0.94,0.98] 12.3%, (11.5%), [-24.0%, 35.1%] 79.8%, (70.7%), [29.3%, 92.2%] Wong2 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (6.6%), [-1.6%, 15.4%]	Rogers ở Tanimoto	0.04, (0.07), [0.02,0.18]	52.4%, (48.0%), [30.2%,62.4%]	8.1%, (6.6%), [-1.6%,15.4%]
RUSSELL & RAO 0.98, (0.98), [0.94,0.98] 12.3%, (11.5%), [-24.0%,35.1%] 79.8%, (70.7%), [29.3%,92.2%] SCOTT 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%,75.3%] 42.3%, (42.4%), [-4.5%,87.6%] SIMPLE MATCHING 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] SOKAL 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] SØRENSEN-DICE 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] TARANTULA 0.97, (0.97), [0.94,0.98] 1.9%, (11.7%), [-2.7%,35.1%] 91.5%, (78.5%), [29.3%,98.3%] WONG1 0.98, (0.98), [0.94,0.98] 12.3%, (11.5%), [-24.0%,35.1%] 79.8%, (70.7%), [29.3%,92.2%] WONG3 0.2, (0.2), [0.16,0.22] 40.1%, (42.4%), [22.3%,65.0%] 15.6%, (17.4%), [-0.2%,53.1%] WONG2 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%]	Rogot1	0.2, (0.21), [0.1,0.3]	60.5%, (56.8%), [29.6%,75.3%]	42.3%, (42.4%), [-4.5%,87.6%]
SCOTT 0.2, (0.21), [0.1,0.3] 60.5%, (56.8%), [29.6%,75.3%] 42.3%, (42.4%), [-4.5%,87.6%] SIMPLE MATCHING 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] SOKAL 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] SØKAL 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] SØRENSEN-DICE 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] TARANTULA 0.97, (0.97), [0.94,0.98] 1.9%, (11.7%), [-2.7%,35.1%] 91.5%, (78.5%), [29.3%,98.3%] WONG1 0.98, (0.98), [0.94,0.98] 12.3%, (11.5%), [-24.0%,35.1%] 79.8%, (70.7%), [29.3%,92.2%] WONG3 0.2, (0.2), [0.16,0.22] 40.1%, (42.4%), [22.3%,65.0%] 15.6%, (17.4%), [-0.2%,53.1%] WONG2 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%]	Rogot2	0.42, (0.52), [0.4,0.94]	-57.0%, (-48.6%), [-138.8%,62.0%]	84.4%, (64.3%), [-12.4%,94.9%]
SIMPLE MATCHING 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] SOKAL 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] SØRENSEN-DICE 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] TARANTULA 0.97, (0.97), [0.94,0.98] 1.9%, (11.7%), [-2.7%,35.1%] 91.5%, (78.5%), [29.3%,98.3%] WONG1 0.98, (0.98), [0.94,0.98] 12.3%, (11.5%), [-24.0%,35.1%] 79.8%, (70.7%), [29.3%,92.2%] WONG3 0.2, (0.2), [0.16,0.22] 40.1%, (42.4%), [22.3%,65.0%] 15.6%, (17.4%), [-0.2%,53.1%] WONG2 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%]	Russell ở Rao	0.98, (0.98), [0.94,0.98]	12.3%, (11.5%), [-24.0%,35.1%]	79.8%, (70.7%), [29.3%,92.2%]
SOKAL 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%] SØRENSEN-DICE 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] TARANTULA 0.97, (0.97), [0.94,0.98] 1.9%, (11.7%), [-2.7%,35.1%] 91.5%, (78.5%), [29.3%,98.3%] WONG1 0.98, (0.98), [0.94,0.98] 12.3%, (11.5%), [-24.0%,35.1%] 79.8%, (70.7%), [29.3%,92.2%] WONG3 0.2, (0.2), [0.16,0.22] 40.1%, (42.4%), [22.3%,65.0%] 15.6%, (17.4%), [-0.2%,53.1%] WONG2 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%]	Scott	0.2, (0.21), [0.1,0.3]	60.5%, (56.8%), [29.6%,75.3%]	42.3%, (42.4%), [-4.5%,87.6%]
SØRENSEN-DICE 0.98, (0.97), [0.94,0.98] 3.7%, (10.5%), [-4.6%,35.1%] 92.1%, (77.9%), [29.3%,98.0%] TARANTULA 0.97, (0.97), [0.94,0.98] 1.9%, (11.7%), [-2.7%,35.1%] 91.5%, (78.5%), [29.3%,98.3%] WONG1 0.98, (0.98), [0.94,0.98] 12.3%, (11.5%), [-24.0%,35.1%] 79.8%, (70.7%), [29.3%,92.2%] WONG3 0.2, (0.2), [0.16,0.22] 40.1%, (42.4%), [22.3%,65.0%] 15.6%, (17.4%), [-0.2%,53.1%] WONG2 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%]	SIMPLE MATCHING	0.04, (0.07), [0.02,0.18]	52.4%, (48.0%), [30.2%,62.4%]	8.1%, (6.6%), [-1.6%,15.4%]
TARANTULA 0.97, (0.97), [0.94,0.98] 1.9%, (11.7%), [-2.7%,35.1%] 91.5%, (78.5%), [29.3%,98.3%] WONG1 0.98, (0.98), [0.94,0.98] 12.3%, (11.5%), [-24.0%,35.1%] 79.8%, (70.7%), [29.3%,92.2%] WONG3 0.2, (0.2), [0.16,0.22] 40.1%, (42.4%), [22.3%,65.0%] 15.6%, (17.4%), [-0.2%,53.1%] WONG2 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%]	Sokal	0.04, (0.07), [0.02,0.18]	52.4%, (48.0%), [30.2%,62.4%]	8.1%, (6.6%), [-1.6%,15.4%]
Wong1 0.98, (0.98), [0.94,0.98] 12.3%, (11.5%), [-24.0%,35.1%] 79.8%, (70.7%), [29.3%,92.2%] Wong3 0.2, (0.2), [0.16,0.22] 40.1%, (42.4%), [22.3%,65.0%] 15.6%, (17.4%), [-0.2%,53.1%] Wong2 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%]	Sørensen-Dice	0.98, (0.97), [0.94,0.98]	3.7%, (10.5%), [-4.6%,35.1%]	92.1%, (77.9%), [29.3%,98.0%]
Wong3 0.2, (0.2), [0.16, 0.22] 40.1%, (42.4%), [22.3%, 65.0%] 15.6%, (17.4%), [-0.2%, 53.1%] Wong2 0.04, (0.07), [0.02, 0.18] 52.4%, (48.0%), [30.2%, 62.4%] 8.1%, (6.6%), [-1.6%, 15.4%]	TARANTULA	0.97, (0.97), [0.94,0.98]	1.9%, (11.7%), [-2.7%,35.1%]	91.5%, (78.5%), [29.3%,98.3%]
Wong2 0.04, (0.07), [0.02,0.18] 52.4%, (48.0%), [30.2%,62.4%] 8.1%, (6.6%), [-1.6%,15.4%]	Wong1	0.98, (0.98), [0.94,0.98]	12.3%, (11.5%), [-24.0%,35.1%]	79.8%, (70.7%), [29.3%,92.2%]
	Wong3	0.2, (0.2), [0.16,0.22]	40.1%, (42.4%), [22.3%,65.0%]	15.6%, (17.4%), [-0.2%,53.1%]
ZOLTAR 0.48, (0.58), [0.32.0.98] 3.2%, (-22.7%), [-203.3%, 55.5%] 79.4%, (67.6%), [10.0%, 96.3%]	Wong2	0.04, (0.07), [0.02,0.18]	52.4%, (48.0%), [30.2%,62.4%]	8.1%, (6.6%), [-1.6%,15.4%]
	Zoltar	0.48, (0.58), [0.32,0.98]	3.2%, (-22.7%), [-203.3%,55.5%]	79.4%, (67.6%), [10.0%,96.3%]

Table 5: Results of the 10-fold cross validation of $\widetilde{\mathcal{R}}_{\lambda_p}(\Omega).$

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SBFL ranking metric	$\widetilde{\lambda_{n}}, (\overline{\lambda_{n}}), [\min, \max]$	$\widetilde{RI}_{\widetilde{\mathscr{R}}^*}^{SBFL}, (\overline{RI}_{\widetilde{\mathscr{R}}^*}^{SBFL}), [min, max]$	$\widetilde{RI}_{\widetilde{R}^*}^{LM}, (\overline{RI}_{\widetilde{R}^*}^{LM}), [\min, \max]$
Ample	0.99, (0.96), [0.9,1.0]	0.0%, (-2.8%), [-21.9%,18.5%]	97.9%, (97.1%), [94.1%,98.7%]
Anderberg	0.98, (0.97), [0.94,0.98]	10.2%, (10.5%), [-42.5%,41.7%]	98.6%, (98.3%), [95.3%,99.6%]
Arithmetic Mean	0.98, (0.98), [0.98,0.98]	10.2%, (15.8%), [-6.5%, 50.0%]	98.7%, (98.2%), [94.3%,99.6%]
Cohen	0.98, (0.97), [0.94,0.98]	10.2%, (15.7%), [-6.5%,50.0%]	98.7%, (98.2%), [94.3%,99.6%]
Dice	0.98, (0.97), [0.94,0.98]	10.2%, (10.5%), [-42.5%,41.7%]	98.6%, (98.3%), [95.3%,99.6%]
Euclid	0.38, (0.43), [0.34,0.9]	91.1%, (90.6%), [81.1%,97.2%]	51.7%, (49.9%), [-4.9%,92.9%]
Fleiss	0.98, (0.99), [0.98,1.0]	1.7%, (3.5%), [-12.2%,23.3%]	97.5%, (97.5%), [94.7%,99.5%]
Geometric Mean	0.98, (0.98), [0.98,0.98]	10.5%, (16.9%), [-2.9%,56.3%]	98.7%, (98.1%), [94.3%,99.6%]
Goodman	0.98, (0.97), [0.94,0.98]	10.2%, (10.5%), [-42.5%,41.7%]	98.6%, (98.3%), [95.3%,99.6%]
GP13	0.98, (0.98), [0.94,0.98]	13.2%, (12.2%), [-30.5%,60.6%]	98.7%, (98.3%), [96.7%,99.5%]
Hamann	0.38, (0.43), [0.34,0.9]	91.1%, (90.6%), [81.1%,97.2%]	51.7%, (49.9%), [-4.9%,92.9%]
HAMMING ETC.	0.38, (0.43), [0.34,0.9]	91.1%, (90.6%), [81.1%,97.2%]	51.7%, (49.9%), [-4.9%,92.9%]
Harmonic Mean	0.98, (0.97), [0.9,1.0]	0.0%, (4.2%), [-32.5%,35.7%]	98.7%, (98.3%), [95.7%,99.6%]
JACCARD	0.98, (0.97), [0.94,0.98]	10.2%, (10.5%), [-42.5%,41.7%]	98.6%, (98.3%), [95.3%,99.6%]
Kulczynski1	0.98, (0.97), [0.94,0.98]	10.2%, (10.5%), [-42.5%,41.7%]	98.6%, (98.3%), [95.3%,99.6%]
Kulczynski2	0.98, (0.97), [0.9,0.98]	12.9%, (14.7%), [-7.4%,50.0%]	98.6%, (98.6%), [97.3%,99.7%]
M1	0.38, (0.43), [0.34,0.9]	91.1%, (90.6%), [81.1%,97.2%]	51.7%, (49.9%), [-4.9%,92.9%]
M2	0.98, (0.98), [0.98,0.98]	9.4%, (11.5%), [-11.4%,53.6%]	98.6%, (98.4%), [97.2%,99.5%]
Осніаі	0.98, (0.96), [0.92,0.98]	4.9%, (10.8%), [-42.5%,56.3%]	98.4%, (98.2%), [95.3%,99.7%]
Осніаі2	0.98, (0.97), [0.92,0.98]	9.5%, (15.8%), [-3.5%,56.3%]	98.7%, (98.1%), [93.7%,99.6%]
NAISH2 (OP2)	0.98, (0.98), [0.94,0.98]	13.2%, (12.2%), [-30.5%,60.6%]	98.7%, (98.3%), [96.7%,99.5%]
Overlap	0.98, (0.98), [0.98,0.98]	67.1%, (66.7%), [43.2%,84.1%]	96.9%, (96.8%), [94.2%,99.4%]
Rogers & Tanimoto	0.38, (0.43), [0.34,0.9]	91.1%, (90.6%), [81.1%,97.2%]	51.7%, (49.9%), [-4.9%,92.9%]
Rogot1	0.98, (0.97), [0.94,0.98]	8.3%, (8.8%), [-19.4%,28.6%]	97.9%, (97.8%), [94.2%,99.6%]
Rogot2	0.98, (0.97), [0.9,1.0]	0.0%, (8.0%), [-5.4%,35.7%]	98.7%, (98.4%), [96.8%,99.6%]
Russell & Rao	0.98, (0.98), [0.98,0.98]	75.9%, (73.8%), [48.6%,84.1%]	96.1%, (96.1%), [93.0%,99.2%]
Scott	0.98, (0.97), [0.94,0.98]	8.3%, (8.8%), [-19.4%,28.6%]	97.9%, (97.8%), [94.2%,99.6%]
Simple Matching	0.38, (0.43), [0.34,0.9]	91.1%, (90.6%), [81.1%,97.2%]	51.7%, (49.9%), [-4.9%,92.9%]
Sokal	0.38, (0.43), [0.34,0.9]	91.1%, (90.6%), [81.1%,97.2%]	51.7%, (49.9%), [-4.9%,92.9%]
Sørensen-Dice	0.98, (0.97), [0.94,0.98]	10.2%, (10.5%), [-42.5%,41.7%]	98.6%, (98.3%), [95.3%,99.6%]
Tarantula	0.98, (0.96), [0.9,0.98]	15.3%, (17.8%), [-6.2%,50.0%]	98.6%, (98.4%), [96.6%,99.7%]
Wong1	0.98, (0.98), [0.98,0.98]	75.9%, (73.8%), [48.6%,84.1%]	96.1%, (96.1%), [93.0%,99.2%]
Wong3	0.69, (0.69), [0.58,0.78]	90.4%, (88.5%), [71.1%,96.6%]	66.8%, (64.8%), [31.3%,92.0%]
Wong2	0.38, (0.43), [0.34,0.9]	91.1%, (90.6%), [81.1%,97.2%]	51.7%, (49.9%), [-4.9%,92.9%]
Zoltar	0.98, (0.96), [0.9,0.98]	8.5%, (12.7%), [-15.9%,50.0%]	98.6%, (98.6%), [97.3%,99.7%]

Table 6: Results of the 10-fold cross validation of $\widetilde{\mathcal{R}}^*_{\lambda p}(\Omega).$

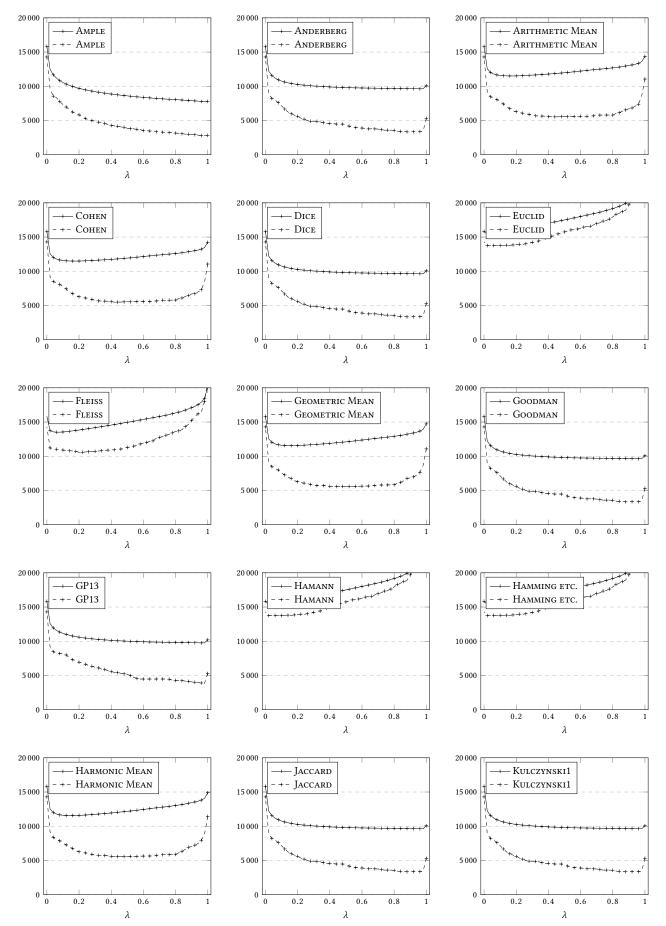


Figure 1: Plots of $\overline{\mathcal{R}}_{\lambda}(\Omega)$ (solid) and $\widetilde{\mathcal{R}}_{\lambda}(\Omega)$ (dashed) for different SBFL ranking metrics.

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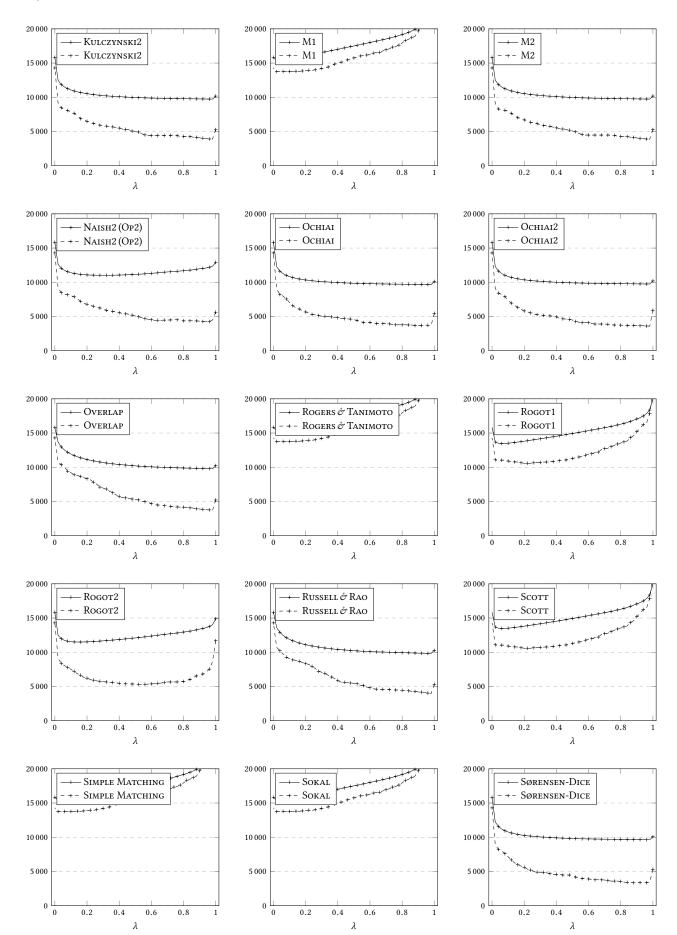


Figure 2: Plots of $\overline{\mathcal{R}}_{\lambda}(\Omega)$ (solid) and $\widetilde{\mathcal{R}}_{\lambda}(\Omega)$ (dashed) for different SBFL ranking metrics.

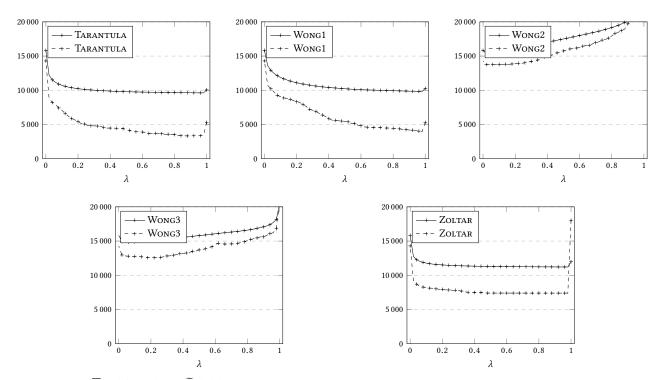


Figure 3: Plots of $\overline{\mathcal{R}}_{\lambda}(\Omega)$ (solid) and $\widetilde{\mathcal{R}}_{\lambda}(\Omega)$ (dashed) for different SBFL ranking metrics.

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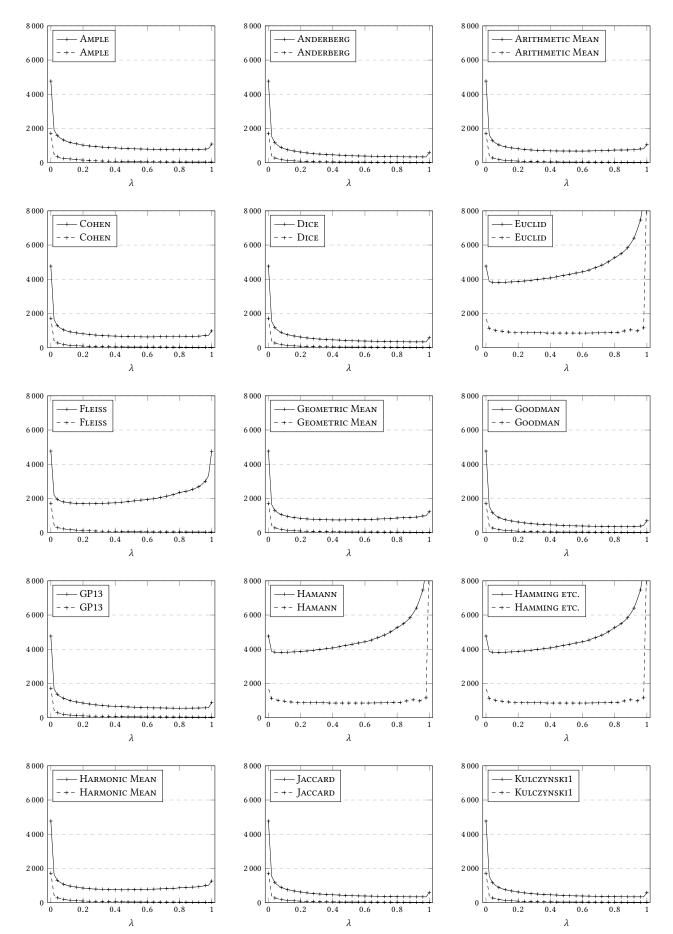
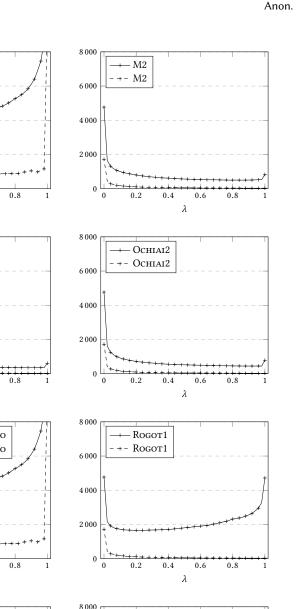
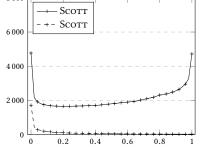


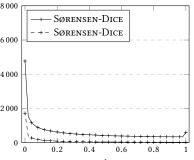
Figure 4: Plots of $\overline{\mathcal{R}}^*_{\lambda}(\Omega)$ (solid) $\widetilde{\mathcal{R}}^*_{\lambda}(\Omega)$ (dashed) for different SBFL ranking metrics.

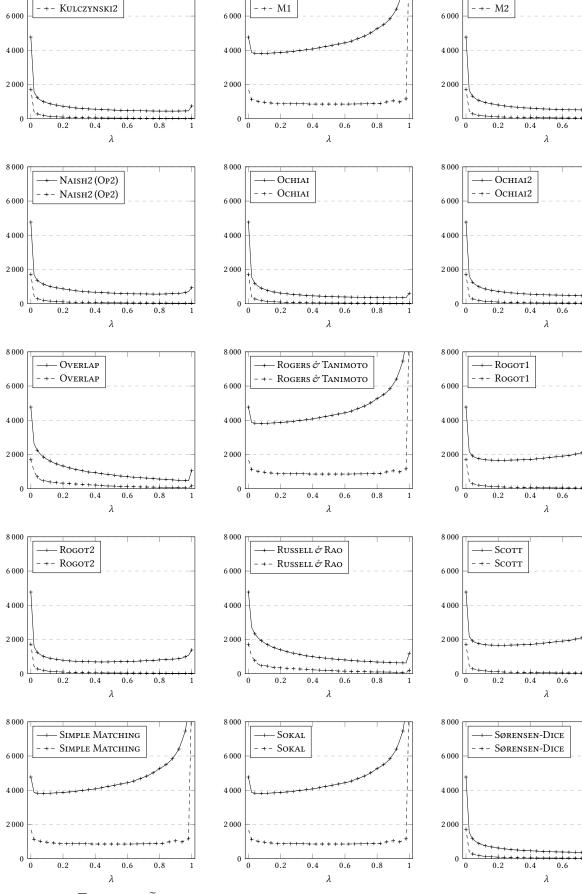
- Kulczynski2

8 0 0 0









8 000

+-- M1

+- M1

Figure 5: Plots of $\overline{\mathcal{R}}^*_{\lambda}(\Omega)$ (solid) $\widetilde{\mathcal{R}}^*_{\lambda}(\Omega)$ (dashed) for different SBFL ranking metrics.

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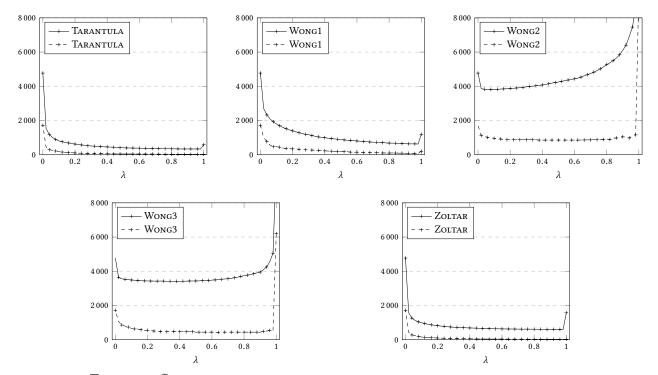


Figure 6: Plots of $\overline{\mathcal{R}}^*_{\lambda}(\Omega)$ (solid) $\widetilde{\mathcal{R}}^*_{\lambda}(\Omega)$ (dashed) for different SBFL ranking metrics.