Venn diagram note

I created the Venn diagram with the function *venn.m* and the following link are the MATLAB exchange file.

(Link: <https://www.mathworks.com/matlabcentral/fileexchange/22282-venn> )

I want to label the Venn diagrams of each simulated data, but the Venn diagrams of correlation parts are too overlapped. However, in here I will show the details of the Venn diagrams.

In each figures (Sim1, Sim2, Sim3, Sim4 and Sim5), there are four Venn diagram and from LEFT to RIGHT would be Activation (Pearson, Spearman and the best one of SDC), Repression (Pearson, Spearman and the best one of SDC), Activation (the best one of SDC and the best two of network methods), Repression (the best one of SDC and the best two of network methods).

Following tables include the (true positive/true negative) number of each method prediction and how many predictions are overlapped.

**Simulated data 1**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Color | Activation (corr) | Repression (corr) | Activation (method) | Repression (method) |
| Red | Pearson | Pearson | SDC-S | SDC-S |
| Green | Spearman | Spearman | GRNVBEM | GRNVBEM |
| Blue | SDC-S | SDC-S | SINCERTIES | SINCERITIES |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Number | Activation (corr) | Repression (corr) | Activation (method) | Repression (method) |
| R (Red) | 73 | 72 | 74 | 73 |
| G (Green) | 72 | 71 | 36 | 31 |
| B (Blue) | 74 | 73 | 34 | 13 |
| R X G | 71 | 68 | 34 | 25 |
| G X B | 72 | 70 | 20 | 4 |
| R X B | 72 | 71 | 30 | 10 |
| R X G X B | 71 | 68 | 18 | 2 |

**Simulated data 2**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Color | Activation (corr) | Repression (corr) | Activation (method) | Repression (method) |
| Red | Pearson | Pearson | SDC-S | SDC-S |
| Green | Spearman | Spearman | GRNVBEM | GRNVBEM |
| Blue | SDC-S | SDC-S | SINCERTIES | SINCERITIES |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Number | Activation (corr) | Repression (corr) | Activation (method) | Repression (method) |
| R (Red) | 106 | 77 | 106 | 82 |
| G (Green) | 104 | 80 | 42 | 44 |
| B (Blue) | 106 | 82 | 67 | 66 |
| R X G | 95 | 69 | 38 | 35 |
| G X B | 101 | 75 | 26 | 26 |
| R X B | 100 | 75 | 59 | 52 |
| R X G X B | 95 | 68 | 25 | 23 |

**Simulated data 3**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Color | Activation (corr) | Repression (corr) | Activation (method) | Repression (method) |
| Red | Pearson | Pearson | SDC-S | SDC-S |
| Green | Spearman | Spearman | TSNI | TSNI |
| Blue | SDC-S | SDC-S | SINCERTIES | SINCERITIES |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Number | Activation (corr) | Repression (corr) | Activation (method) | Repression (method) |
| R (Red) | 70 | 82 | 77 | 81 |
| G (Green) | 74 | 79 | 17 | 12 |
| B (Blue) | 77 | 81 | 31 | 35 |
| R X G | 67 | 79 | 12 | 11 |
| G X B | 73 | 79 | 2 | 7 |
| R X B | 69 | 81 | 24 | 31 |
| R X G X B | 67 | 79 | 2 | 13 |

**Simulated data 4**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Color | Activation (corr) | Repression (corr) | Activation (method) | Repression (method) |
| Red | Pearson | Pearson | SDC-S | SDC-S |
| Green | Spearman | Spearman | GRNVBEM | GRNVBEM |
| Blue | SDC-S | SDC-S | SINCERTIES | SINCERITIES |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Number | Activation (corr) | Repression (corr) | Activation (method) | Repression (method) |
| R (Red) | 75 | 85 | 78 | 88 |
| G (Green) | 79 | 90 | 28 | 26 |
| B (Blue) | 78 | 88 | 41 | 14 |
| R X G | 72 | 84 | 25 | 24 |
| G X B | 77 | 88 | 9 | 6 |
| R X B | 73 | 83 | 35 | 12 |
| R X G X B | 72 | 83 | 9 | 5 |

**Simulated data 5**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Color | Activation (corr) | Repression (corr) | Activation (method) | Repression (method) |
| Red | Pearson | Pearson | SDC-P | SDC-P |
| Green | Spearman | Spearman | TSNI | TSNI |
| Blue | SDC-P | SDC-P | SINCERTIES | SINCERITIES |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Number | Activation (corr) | Repression (corr) | Activation (method) | Repression (method) |
| R (Red) | 81 | 79 | 81 | 80 |
| G (Green) | 84 | 77 | 22 | 14 |
| B (Blue) | 81 | 80 | 38 | 32 |
| R X G | 78 | 73 | 16 | 10 |
| G X B | 78 | 74 | 9 | 5 |
| R X B | 80 | 79 | 33 | 29 |
| R X G X B | 77 | 73 | 7 | 4 |