# BIOS 6312 Project

#### Optimal non-bipartite matching

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#### Outline

- Distance
  - Scalar Distance
  - Mahalnobis Distance

Matches

#### scalar.dist function

#### Absolute distance between points

#### Distance accounts for covariance matrix

```
> gendistance(data.frame(age=c(90,84,91,88,73,82), strokes=c(90,84,91,88,73,82), strokes=c(
```

# Matching

yay matching

# Warning

duck!

#### Definition

the dictionary defines this as defined

#### Example

this was supposed to be an example

#### **Theorem**

Distance 
$$a^2 + b^2 = c^2$$

$$\sqrt{(y_0-y_1)^2+(x_0-x_1)^2}$$

gendistance returns a bunch of stuff, in a list

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Covariates data set

gendistance returns a bunch of stuff, in a list

- Covariates data set
- Distance matrix

gendistance returns a bunch of stuff, in a list

- Covariates data set
- Distance matrix
- things...

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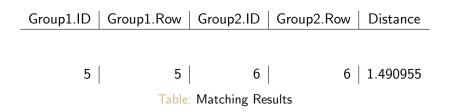
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Group1.ID	Group1.Row	Group2.ID	Group2.Row	Distance
1	1	4	4	1.495769

Table: Matching Results

Group1.ID	Group1.Row	Group2.ID	Group2.Row	Distance
2	2	3	3	1.159632

Table: Matching Results



Group1.ID	Group1.Row	Group2.ID	Group2.Row	Distance
1	1	4	4	1.495769
2	2	3	3	1.159632
5	5	6	6	1.490955

Table: Matching Results