## Vectorization

#### Ivan Jacob Agaloos Pesigan

```
library(linearAlgebra)
```

```
A <- matrix(c("a", "b", "c"), ncol = 2)

colnames(A) <- rownames(A) <- c("v1", "v2")

A

## v1 v2

## v1 "a" "b"

## v2 "b" "c"
```

### Vectorize

```
vec(A)
## [1] "a" "b" "b" "c"
```

### Half-Vectorize

```
vech(A)
## [1] "a" "b" "c"
```

## Strict Half-Vectorize

```
vechs(A)
## [1] "b"
```

# Names for Half-Vectorization

```
vechnames(colnames(A))
## [1] "v1.v1" "v1.v2" "v2.v2"
```

## Names for Strict Half-Vectorization

```
vechsnames(colnames(A))
## [1] "v1.v2"
```