

Accumarray examples

back to [Fan's Reusable Matlab Repository](#) or [Dynamic Asset Repository](#).

Accumarry Basic Example

```
a1 = [1,1,2,2]
```

```
a1 = 1x4
     1     1     2     2
```

```
a2 = [3,2,1,3]
```

```
a2 = 1x4
     3     2     1     3
```

```
a3 = [1,2,3,3]
```

```
a3 = 1x4
     1     2     3     3
```

```
a = [a1;a2;a3]'/2
```

```
a = 4x3
     0.5000     1.5000     0.5000
     0.5000     1.0000     1.0000
     1.0000     0.5000     1.5000
     1.0000     1.5000     1.5000
```

```
prob_a = zeros(size(a)) + 1/12
```

```
prob_a = 4x3
     0.0833     0.0833     0.0833
     0.0833     0.0833     0.0833
     0.0833     0.0833     0.0833
     0.0833     0.0833     0.0833
```

```
[ar_idx_full, ~, ar_idx_of_unique] = unique(a)
```

```
ar_idx_full = 3x1
     0.5000
     1.0000
     1.5000
ar_idx_of_unique = 12x1
     1
     1
     2
     2
     3
     2
     1
     3
     1
     2
     ⋮
     ⋮
```

```
mt_idx_of_unique = reshape(ar_idx_of_unique, size(a))
```

```
mt_idx_of_unique = 4×3
    1     3     1
    1     2     2
    2     1     3
    2     3     3
```

```
accumarray(mt_idx_of_unique(:,1), prob_a(:,1))
```

```
ans = 2×1
    0.1667
    0.1667
```

```
accumarray(mt_idx_of_unique(:,2), prob_a(:,2))
```

```
ans = 3×1
    0.0833
    0.0833
    0.1667
```

```
accumarray(mt_idx_of_unique(:,3), prob_a(:,3))
```

```
ans = 3×1
    0.0833
    0.0833
    0.1667
```