

 [stdlib](#) / [array](#) / [shape](#)

Array Shape

Determine (nested) array dimensions.

Usage

```
var arrayShape = require( '@stdlib/array/shape' );
```

arrayShape(arr)

Returns array dimensions.

```
var arr = [  
  [ 1, 2, 3 ],  
  [ 4, 5, 6 ],  
  [ 7, 8, 9 ]  
];  
  
var shape = arrayShape( arr );  
// returns [ 3, 3 ]
```

The function **ignores** inconsistent dimensions.

```
var arr = [  
  [ 1, 2, 3 ],  
  [ 4, 5, 6 ],  
  [ 7, 8 ]  
];  
  
var shape = arrayShape( arr );  
// returns [ 3 ]
```

Examples

```
var arrayShape = require( '@stdlib/array/shape' );  
  
var shape;  
var arr;  
  
arr = [ 1, 2, 3 ];  
shape = arrayShape( arr );  
// returns [ 3 ]  
  
arr = [  
  [ 1 ],  
  [ 2 ],  
  [ 3 ]  
];  
shape = arrayShape( arr );  
// returns [ 3, 1 ]  
  
arr = [  
  [],
```

```
    [],  
    []  
];  
shape = arrayShape( arr );  
// returns [ 3, 0 ]  
  
arr = [  
    [ 1, 2, 3 ]  
];  
shape = arrayShape( arr );  
// returns [ 1, 3 ]  
  
arr = [  
    [ [ 1 ] ],  
    [ [ 2 ] ],  
    [ [ 3 ] ]  
];  
shape = arrayShape( arr );  
// returns [ 3, 1, 1 ]  
  
arr = [ [ [ [ 1, 2, 3 ] ] ] ];  
shape = arrayShape( arr );  
// returns [ 1, 1, 1, 3 ]  
  
arr = [  
    [ 1, 2 ],  
    [ 3, 4 ]  
];  
shape = arrayShape( arr );  
// returns [ 2, 2 ]  
  
arr = [  
    [ 1, 2, 3 ],  
    [ 4, 5, 6 ],  
    [ 7, 8, 9 ]  
];  
shape = arrayShape( arr );
```

```
// returns [ 3, 3 ]

arr = [
  [ 1, 2, 3 ],
  null,
  [ 7, 8, 9 ]
];
shape = arrayShape( arr );
// returns [ 3 ]

arr = [
  [ 1, 2, 3 ],
  [ [ 4, 5, 6 ] ],
  [ [ 7, 8, 9 ] ]
];
shape = arrayShape( arr );
// returns [ 3 ]

arr = [
  [ [ 1, 2, 3 ] ],
  [ 4, 5, 6 ],
  [ [ 7, 8, 9 ] ]
];
shape = arrayShape( arr );
// returns [ 3 ]

arr = [
  [ [ 1, 2, 3 ] ],
  [ [ 4, 5, 6 ] ],
  [ 7, 8, 9 ]
];
shape = arrayShape( arr );
// returns [ 3 ]

arr = [
  [ [ [ 1, 2, 3 ] ] ],
  [ [ 4, 5, 6 ] ],
```

```
    [ [ [ 7, 8, 9 ] ] ]  
];  
shape = arrayShape( arr );  
// returns [ 3, 1 ]
```

See Also

[@stdlib/ndarray/ctor](#)

multidimensional array constructor.