

# Node Modules

Jogesh K. Muppala



THE DEPARTMENT OF  
**COMPUTER SCIENCE & ENGINEERING**  
計算機科學及工程學系



香港科技大學  
THE HONG KONG UNIVERSITY OF  
SCIENCE AND TECHNOLOGY

# JavaScript Modules

- JavaScript does not define a standard library
- CommonJS API fills this gap by defining APIs for common application needs
  - It defines a module format
  - Node follows the CommonJS module specification

# Node Modules

- Each file in Node is its own module
- The *module* variable gives access to the current module definition in a file
- The *module.exports* variable determines the export from the current module
- The *require* function is used to import a module

# Module Example

- *rectangle* Module:

```
module.exports = function () {  
  return {  
    perimeter: function(x,y) { return (2*(x+y)); },  
    area: function(x,y) { return ( x*y ) ); }  
  };  
}
```

- Using this module:

```
var rect = require('./rectangle');
```

# Module Example: Alternative

- rectangle Module:

```
exports.perimeter = function (x, y) {  
    return (2*(x+y));  
}  
  
exports.area = function (x, y) {  
    return (x*y);  
}
```

  - *exports* is alias for *module.exports*

# Exercise: Node Modules

- Writing a simple Node application
- Understanding Node modules