

Node.js and NPM

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

What is Node.js?

- JavaScript runtime built on Chrome V8 JavaScript Engine
- Uses an event-driven, non-blocking I/O model
 - Makes it lightweight and efficient

Node Architecture

Node Core / Standard Library (JS)

Node Bindings (C++)

Chrome V8 (C++)

libuv (C)

Node.js Use Cases

- Utilities written in JavaScript for web development:
 - Bower, Grunt, Gulp, Yeoman etc.
- Server-side Development
 - Web server, Business logic, Database access

Node Package Manager

- Node package manager (NPM): manages ecosystem of node modules / packages
- A package contains:
 - JS files
 - package.json (manifest)