Notes on Implementing Search Methods

Using omega

- Use ssh to obtain an interactive shell.
  - Download putty, or ssh software from oit.uta.edu.
- Use SFTP to transfer files to and from omega.
  - Download software from oit.uta.edu.
  - Alternative: if you have cygwin or a Mac, use scp.
  - Alternative: use an X server and emacs to edit files on omega directly.
- From the interactive shell, use a compiler to compile your code (javac, g++, CC, Makefiles).

States and Nodes

- The difference between a state and a node.
  - A state describes how the world is at a specific moment.
    - Defining states does not require a search tree.
  - A node is only defined with respect to a search tree. The path from the root to a node defines a sequence of states.

State Class

(C++-style)

```
class State
{
    char * name;
    char ** neighbors;
    double * neighbor_distances;
   // possibly more variables, constructors,…
};
```

Class Node

```
class Node
{
    Node * parent;
    State state;
     double cost;

   // possibly more variables, constructors,…
};
```

If You Are Lost

- Compare your code to the text pseudocode.
- Ask yourself: which part of the pseudocode do I have a problem with?
- In principle, you should be able to implement pseudocode easily.