

# Homework 3: Structural and Behavioral Design Patterns

Samanjate Sood

February 18, 2018

## **4. Extending the AST**

### **(d) Visitor Design Pattern**

The main benefit for using this design pattern is that we can define a new operation to the Nodes without changing the implementation in all the Node classes, as we did for implementing search to a system with the Visitor interface. It follows the open/close principle where it is open for extension and closed for modification. Each visitor object has a state so can work independently.