

# Object-Oriented Programming

Hard to define ...

- The combination of data and functions
- A way to model the real world
- The proper admixture of three things (E.I.P.)
  - Encapsulation
  - Inheritance
  - Polymorphism

# Object-Oriented Programming

## Dependency inversion changes everything

- None is unique to OO
- Encapsulation & Inheritance are trivial
- Polymorphism is the **KEY**
  - Lead to a safe and efficient replacement for function pointers
  - Enable *dependency inversion*
    - Fully control the direction of all source code dependencies in the system
    - High-level policies are independent from low-level details
    - Independent develop-ability and deployability