

# Module 3: Object-Orientation in Go

## Topic 2.3: Pointer Receivers, Referencing, Dereferencing

# No Need to Dereference

- Point is referenced as p, not \*p
- Dereferencing is automatic with . operator

```
func (p *Point) OffsetX(v int) {  
    p.x = p.x + v  
}
```

# No Need to Reference

- Do not need to reference when calling the method

```
func main() {  
    p := Point{3, 4}  
    p.OffsetX(5)  
    fmt.Println(p.x)  
}
```

# Using Pointer Receivers

- Good programming practice:
  1. All methods for a type have **pointer receivers**, or
  2. All methods for a type have **non-pointer receivers**
- Mixing pointer/non-pointer receivers for a type will get confusing
  - Pointer receiver allows modification