

## 1 Intro - lightboard

Everything follows right hand rule

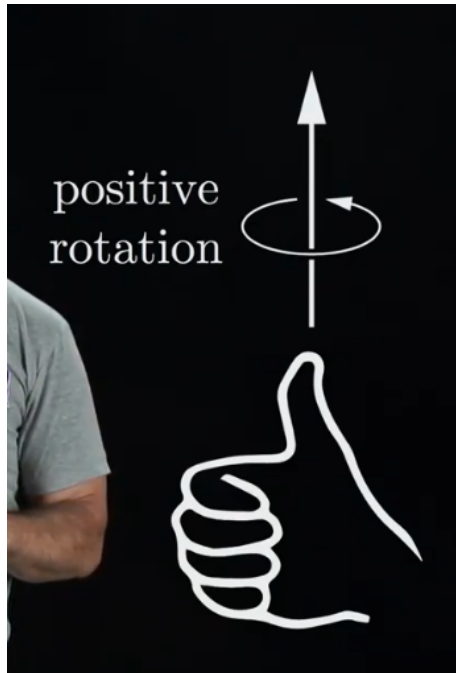


Figure 1:

## 2 Foundation of mobile robotics ch-2

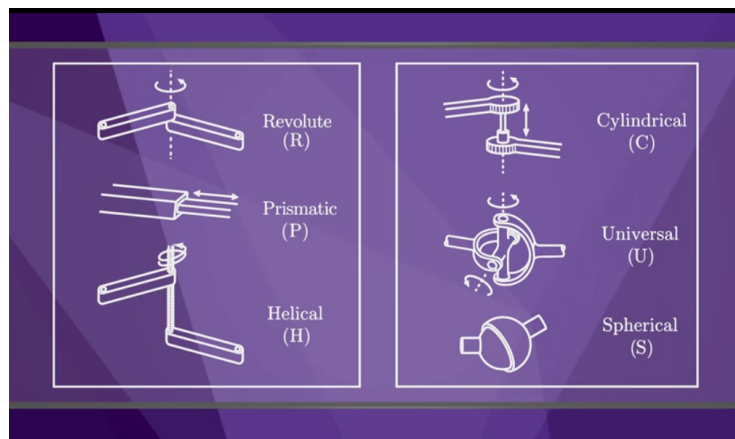
### 2.1 Degrees of freedom rigid body

- **Configuration** - A specific position of the position of all points of robot
- **C-space** - The space of all configuration
- **degrees of freedom** - dimension of c space
- Rigid body has 6 degrees of freedom

- $dof = \sum(\text{freedom points}) - \text{no.of.constraints}$

points	dof	no.of.constraints	constraints
point A	2	0	-
point B	2	1	$d_{ab}$
Point C	2	2	$d_{ac}, d_{bc}$

- $dof = m(N - 1) - \sum_{i=1}^J c_i$



Figuur 2: