Spot mini - Boston Dynamics.
3-joints- in the leg.
DC motors used.
Linear actuator.

Control.
motor → motor diver → PCB → computer (ROS)

Components.

① DC motors.
② Linear actuators.
③ Motor drivers.
④ PCB

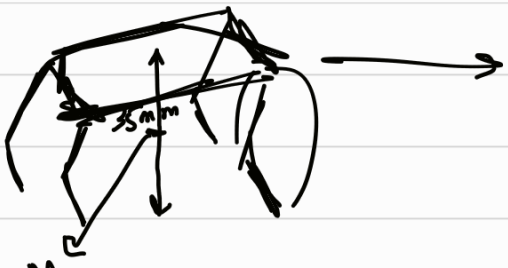
Quadruped → Stoch.
- material - carbon tubes, 3D printed legs

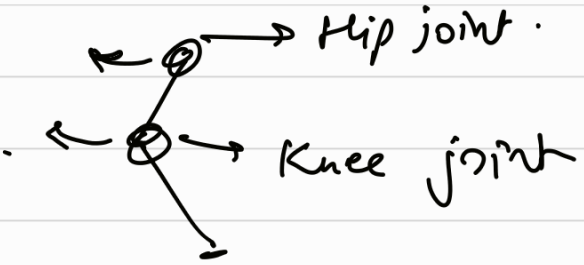
Stoch → miniature Pinscher dog

each leg has 2 actuators

Motors → DC motors. → (spot mini)
→ Servo motors
→ Linear Actuators. (spot mini)

MIT cheetah
Starl ETH
Spot mini
Anymal
Laika Go
Minitaur

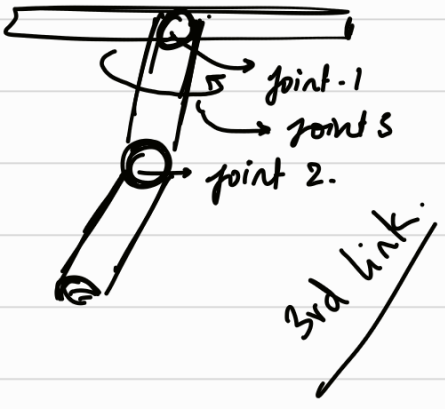




only one way motion / no rotation

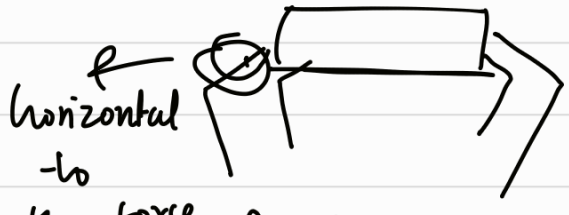
joint pe → servo motors used

3 degrees of freedom.
→ 3 joints.



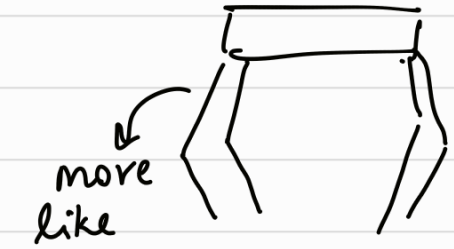
→ each joint will need a motor.

Sprawling type



(Spiders)

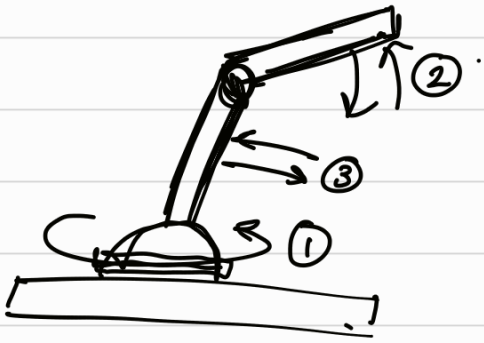
Mammal type



⇒ Degrees of freedom.

Regular Rigid Bodies → 6 dof. → 3 rotational
↙ 3 translational

3 dof of our robot



2 link → 3 dof.
Need 3 motors for each leg.

Actuators as close to the body, reduces MOI on the leg, lowers disturbance

→ Usage of belt to transmit from knee actuators to knee.

* Venom → SRA flagship.

Knee joints → keep gears.

motors, sensors, gears.

Knee joint ⇒ Linear actuator (ananya)

⇒ Belt drive (3 motors on hip).