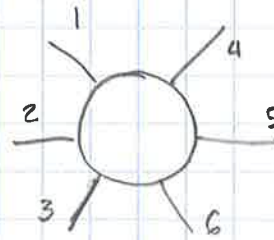
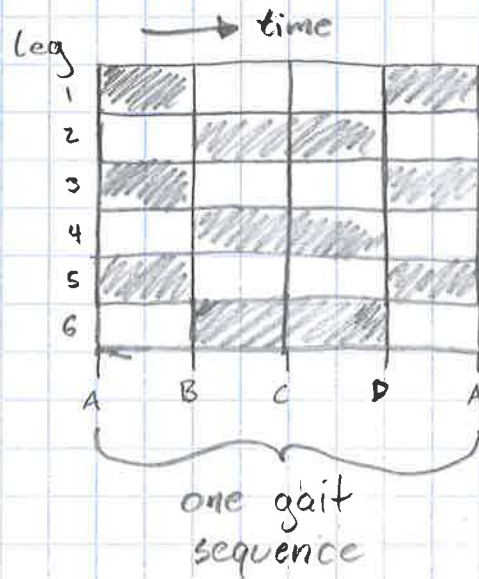
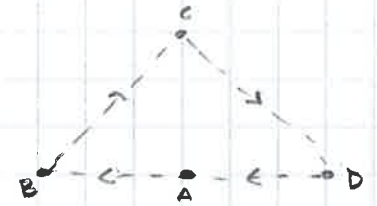


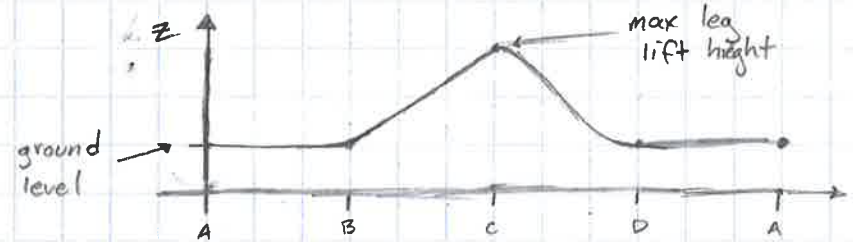
INTERSTATES



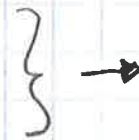
in air
on ground



t_s : is the program update rate;
x # of times a second.



It has a fixed # of steps
larger $|x', y'|$ results in more
steps jumped to.



When $D \rightarrow B$ change in x, y is
opposite x', y'
When $B \rightarrow C$ change in x, y is
in the direction of x', y'

One step has an associated change in z

- When $B \rightarrow C$ change in z is (+)
- When $C \rightarrow D$ change in z is (-)

the step reached in the iteration is indexed
and cached. This dictates how far the leg is in
the step sequence.

of steps

If initial movement:

Legs 1, 3, 5 move $A \rightarrow C$ (stop all x, y motion)

If final movement

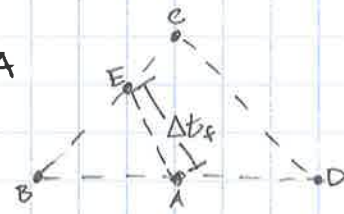
If leg in the air

Draw vector back to A

If leg on ground



Δt_f is fixed parameter

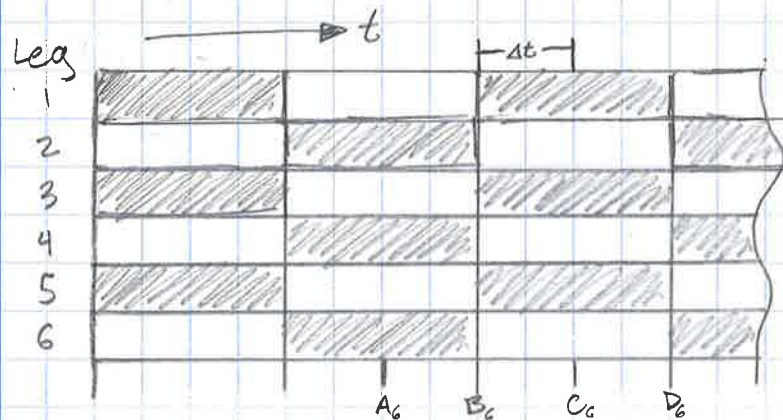


E is the point
the leg is at when
motion stops

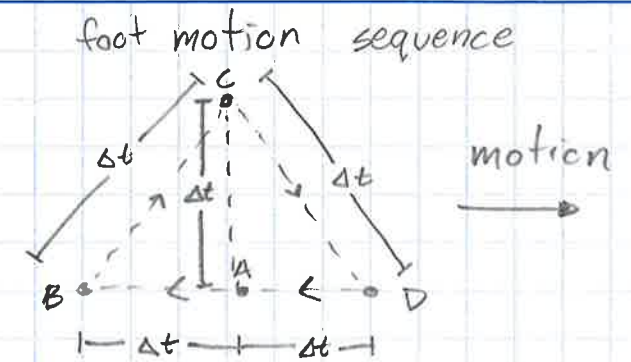
Gait Algorithm

inputs: $[x', y']$ for legs 1-6

$|x', y'|$ determines Δt



□ on the ground
 ■ in the air



- A is default resting point of each leg.
- B → D foot is in the air
- D → A → B foot is on the ground.
- Δt is the time it takes to travel from one point to the next.

