Start - s   on - o   rinse - r   up - u

time - t   fill - f   spin - N   down - d
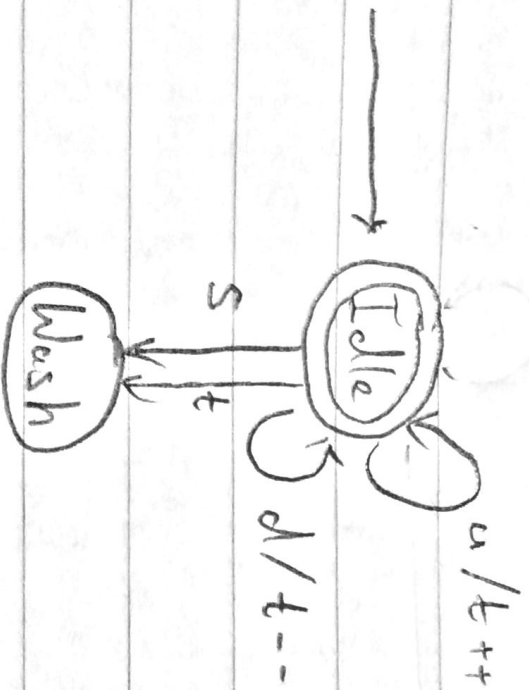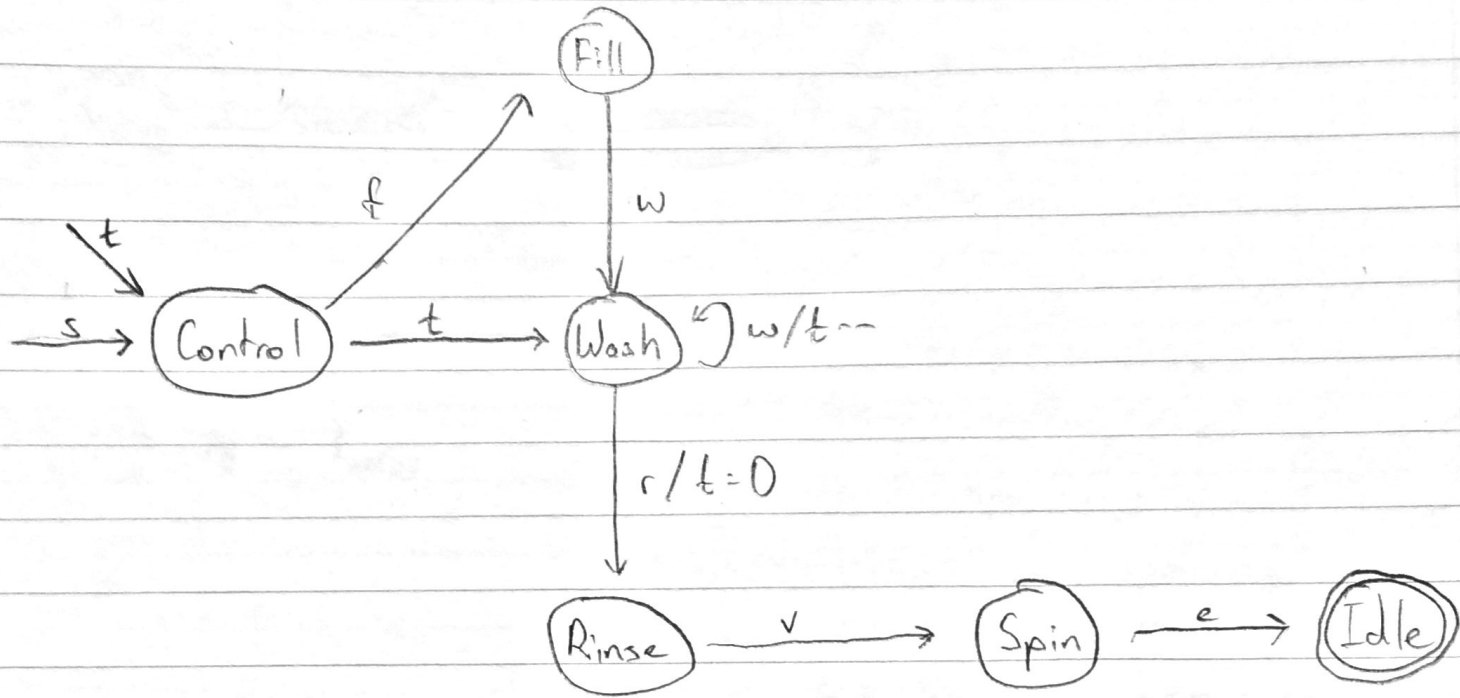
idle - i

        wash - w   end - e

When turned on, the machine goes to idle allowing time to be changed.
When start is pressed, time and a start signal is sent to the wash
state. The machine stays in the wash state during fill, wash, rinse
and spin.

Idle State

The idle state updates the wash time and sends the wash time to the wash state. When the start button is pressed, the idle state sends a start signal to the wash state

Idle, Wash

u/t++

s/t

t

N/t--

s

t

Wash State

Fill

Control $\xrightarrow{\ t\ }$ Wash) w/t--

t

f

w

s

r/t=0

Rinse $\xrightarrow{\ v\ }$ Spin $\xrightarrow{\ e\ }$ Idle

The control state receives the wash time and sends it to the wash state. When the control receives a start signal, it sends a fill signal to the fill state. The fill state fills the resevoir and sends a wash signal to the wash state. The wash state washes and decrements the time. When time is at 0, the wash state sends a rinse signal to the rinse state. The rinse state sprays the washed clothing then sends a spin signal to the spin state. The spin state spins the chamber to remove excess water and then sends a end of cycle signal to the idle state.