
```
function [power, avg_power] = compute_power(voltage_hip, voltage_knee,  
    theta_dot_hip, theta_dot_knee)  
  
% Compute power for hip and knee motors  
  
R_W = 1.3; % ohms  
K_V = 0.0186; % V.s/rad  
  
current_hip = (voltage_hip - K_V * theta_dot_hip)/R_W;  
power_hip = voltage_hip .* current_hip;  
  
current_knee = (voltage_knee - K_V * theta_dot_knee)/R_W;  
power_knee = voltage_knee .* current_knee;  
  
power = power_hip + power_knee;  
avg_power = mean(power);  
  
return
```

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