Gait Scheduler Gait Control Hardware Interface Get Command Main Loop program program program program Hardware Get Command Gait Scheduler Start Gait Controller Interface Calculate which part Get data from Gait Start walking? Check signal? Check angles validity of gait cycle according Scheduler to ticks Calculate which legs Program started?>> Throw error warning Invalid angle? Start counting ticks Swing control Stance control are in contact Calculate knee motor Calculate how many Receive signals via Get velocity data from Get velocity data from Stop button? tick have passed since angle from 6-bar Bluetooth Get Command Get Command the start of phase linkage Get integer data of Send I2C messages to Generate foot and tick Generate opposite Get float data for the Generate touch down Get Command target velocity button data location of the foot Servo Driver Board axes Map float data to max Servo Driver Board Back to Main Map button data to Generate foot locations velocity in x and y sends PWM signals to Gait Scheduler in body frame state data program axes servos Back to Main Back to Main Calculate Inverse Gait Controller program Kinematics program Get joint angles Hardware Interface Back to Main program

	DESIGN	Capstone Project					
Func.	Full name	Sign	Date		Quantity	Weight	Scale
Design	P.D.K.Nguyen		15/05	EL ON IGNABE BIAGBANA			
				FLOWCHART DIAGRAM			
Instruct.	L.D.Hanh				Sheet: 5	Total sheet: 5	
					HO CHI MINH CITY UNIVERSITY OF TECHNOLOGY FACULTY OF MECHANICAL ENGINEERING CLASS CC19CDT1		
Approve.	L.D.Hanh			Capstone Project			