MAKING YOUR RASPBERRY PI BOOTLOAD TO CONTROL BUMBLEPI

<u>Step 1:</u>

• Open your Bluetooth RC car code on Python 3.

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from bluetooth import * import RPi.GPIO as GPIO			
GPI0.setmode(GPI0.BCM) GPI0.setwarnings(False) GPI0.setup(16,GPI0.OUT)			
MotorL1=18 MotorL2=21 enA=20			
MotorR1=26 MotorR2=12 enB=19			
GPI0.setup(MotorL1,GPI0.OUT) GPI0.setup(MotorL2,GPI0.OUT) GPI0.setup(enA,GPI0.OUT)			
GPI0.setup(MotorR1,GPI0.0UT) GPI0.setup(MotorR2,GPI0.0UT) GPI0.setup(enB,GPI0.0UT)			
GPI0.output(MotorL1,False) GPI0.output(MotorL2,False) GPI0.output(MotorR1,False) GPI0.output(MotorR2,False)			
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• Save it as RCcar.py

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GPIO.output (MotorL2, False)		
GPIO.output(MotorR1, False)		
GPI0.output(MotorR2, False)		
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Step 2 (Connect Bluetooth):

• Click on Manage Bluetooth devices icon.



• Make your RaspberryPi's Bluetooth discoverable.



• Turn on Bluetooth from your smart phone, search devices and select "raspberrypi" from available devices.

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• Pair your device with raspberry pi by clicking 'OK'.



• This message shows that you're paired with raspberry pi and not connected yet. Click 'OK'.



Step 3 (Making BOOTLOAD):

• Open Terminal window.



• Type "sudo nano /etc/rc.local" and press enter.

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• Following script will appear(image):

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• Go to the next line of "# write a path for the code to run here". Type path as : "sudo python /home/pi/RCcar.py &". And then press ctrl+x.

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• Press '¥' to save it.

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GNU nano 2.7.4 File: /etc/rc.local Modified # # By default this script does nothing. • sudo systemctl daemon-reload • sudo systemctl enable var-run-sdp.path sudo systemctl enable var-run-sdp.path • write a path for the code to run here • sudo python /home/pi/RCcar.py &	.07- 102 cr
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• Press enter.

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• Then you see terminal window.

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• Then reboot your raspberrypi. Type "**reboot"** then press **enter** and remove hdmi cable and connect motors to bumblePi shield.



Step 4 (Connect BumblePi with Mobile App):

• Open TechTree BumblePi Application and Select "Bumble Pi".



• Select **Allow** to turn on Bluetooth.



• After a while paired Bluetooth devices names appear on screen and then select "raspberrypi" device.

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raspberrypi B8:27:EB:41:5C:79	
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HC-05 00:18:E4:36:32:C0	
QTab Q300 30:AA:BD:A0:DF:16	
OverView F	Projects Bumble Pi

• Car Controlling screen will appear and the **Blue LED** on your bumblepi shield will turn off it means your Bluetooth connection is successful now you can control your car from your smartphone.

If **BlueLED** doesn't turn off it means you're not connected with raspberry pi so reboot your raspberrypi by turn off its switch and then repeat from step 4.

