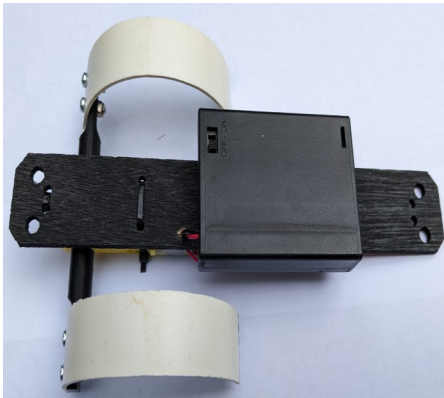


# Getting Started with STEM

Pat McMahon – V2– 4/4/2024

**Design Brief** – At the Workshop, you will Build, Solder and take home a simple ReCycloBot Robot and an Edge Lit Acrylic RGB Display base, built previously using a 3D Printer and Laser Engraver. You will also have a play with a Gaming Keypad using various Makey Makey Apps, to play a piano, record voices, sketch various shapes and play games. Pat will also have on display many of his advanced models and BT/IR Robots for you have a play with.

## ReCycloBot



**Build & Take Home**

We use Recycled 70 mm diameter PVC down pipe to make the WHEGS. Back at school you can use the DXF files to Laser cut the base plate or just use basic Hand Tools. Using a 3D Printer you can use the STL files to print the TT Motor to WHEG attachment arms.

See on Pat's website  
[patsrobots.com](http://patsrobots.com) P012

## RGB Base

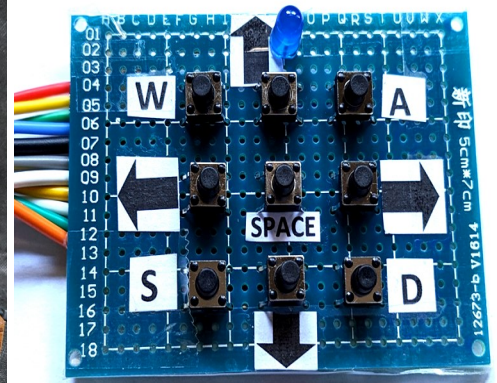


**Build & Take Home**

We use Recycled 90 mm wide Merbau decking offcuts to make the base. Using previously routed underside, we attach an RGB LED Strip to a 5V 24 Mode controller and battery pack. We will insert a clear Laser Engraved Acrylic design and have it illuminate and change colours.

See on Pat's website [patsrobots.com](http://patsrobots.com)  
A075

## Makey Makey



**Play games, piano, record voices**

We use various conductive copper tape models and 3x3 Gaming keypads to run the many Makey Makey Apps to play a piano, record voices, make a sketch and play games.

See on Pat's website [patsrobots.com](http://patsrobots.com)  
MM005 etc

For Information before the Workshop, go to [patsrobots.com](http://patsrobots.com) to view the various models you will take home (P012 &A075) to keep and some of the Makey Makey Apps you will play with on the day.

Pat will have a selection of some of his more advanced Bluetooth/Infrared 4 WD Robot Buggies etc for you to play with on the day.

**When– Friday 19th July, Week 1 Term 3, 2024.**

**Presenter– Pat McMahon**

**Time– 9-30 am till 3-30pm.**

**Lunch & Morning tea will be provided.**

**Where– Whittlesea Tech School, 415 Dalton Road, Epping, 3076.**

Pat has over 125 Arduino and Picaxe STEaM Models. They include his latest developments, his "Infrared/Bluetooth controlled on a Smart phone, Mecanum Wheeled Robot Buggy, "Sports Action 25 LED Projects" for Basketball, Cricket, Golf and Table Tennis and his Infrared Mini Juke Box etc. Visit [patsrobots.com](http://patsrobots.com) website to view Photos, Videos, How to Build, How to Code etc. over 75 Arduino & 50 Picaxe microcontroller and 90 Laser STEaM Projects

Please feel free, prior to the Workshop to give Pat a ring on 0413- 305 092, if you have any questions or concerns about the workshop.