

Melbourne Society of Model and Experimental Engineers Exhibition Report 2019

Words: Phil Lew, Photos: Phil Lew and George Skarbek

The “Let’s Make It” theme invited many other like minded groups to exhibit their projects which showcased each groups knowledge, expertise and ingenuity in the various areas of technology and engineering. It was held at Oakleigh South Secondary College on the weekend of 5-6th October 2019.

Oakleigh South Secondary College...



Located at Bakers Road off Centre Road, is roughly 3km away from our Moorabin premises.

For the two days, the school’s STEM students and teacher were available to showcase student projects.. Some Arduino, but predominately BBC Microbit board based projects using Scratch as the programming language of choice.

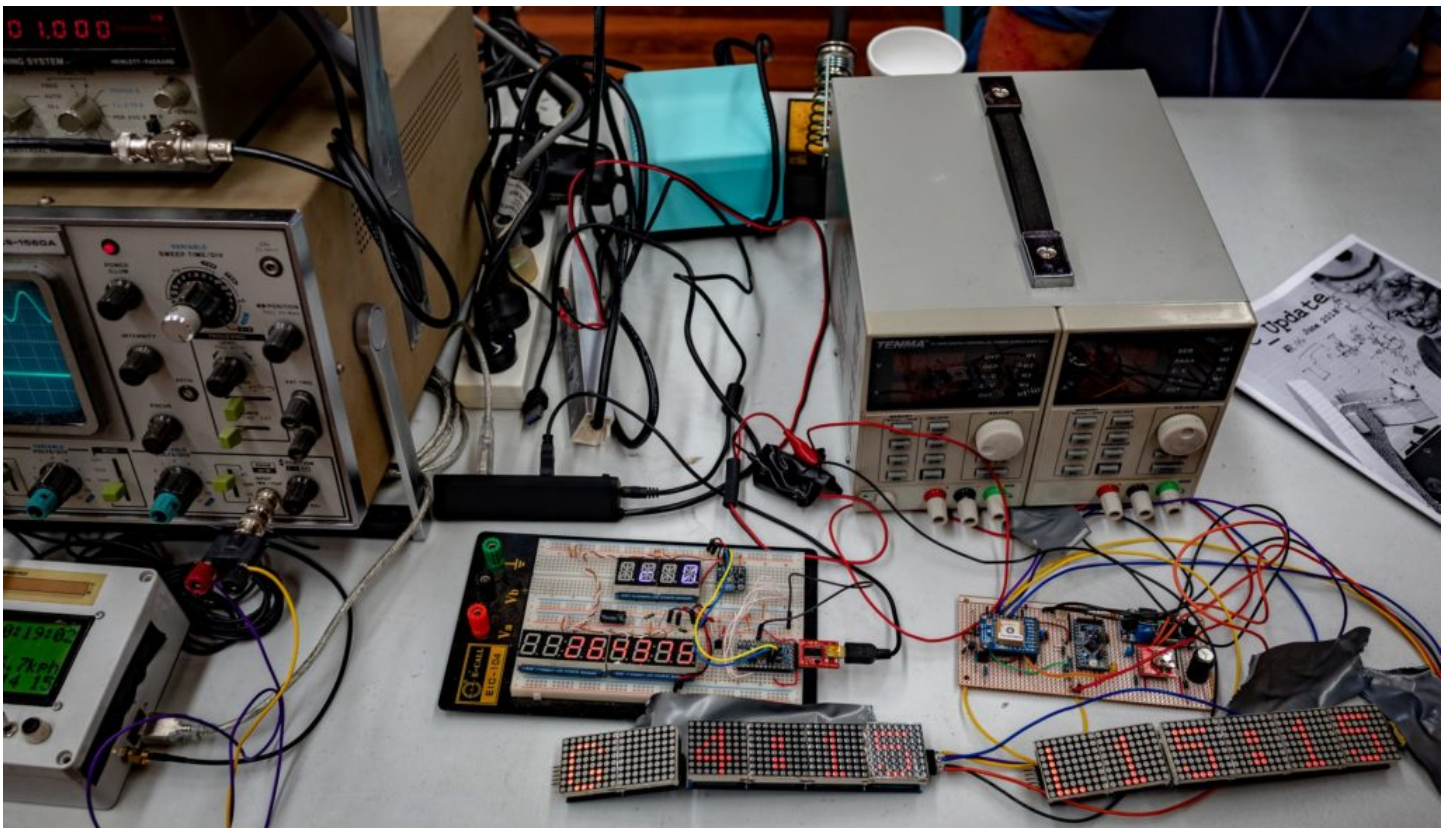
Our Stand...

This the second year in which the Microcontroller Interest Group has represented our club at this exhibition. Last year we had some additional support from the Science and Tech Projects Group.



Our Volunteers....

Bernd Wachs.....Practical electronics demonstration with Led matrix elements, Usage of Electronics Test Equipment





Sean Clarke - Replica IMSAI 8080; Talking Billy Bones, 3D Mini Mill,

Replica IMSAI 8080 is fully working front panel running 8080 code as can be seen in the Windows 7 terminal window in the display above the unit (Modern ESP32 controller used to emulate an early PC.

Emulates 4Mhz Z80, 56K RAM, 4 Floppy drives, VT100 terminal)

Talking Billy Bones was singing sea shanties with the mouth moving in sync with speech was a great source of interest from the students and many others passing by.



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IMSAI 8080 Replica

Retro Computing like its 1975

1. Functional replica kit created by Thangthabkha
2. Modern ESP32 computer used to emulate an early PC
3. Emulates 4MHz Z80, 59K RAM, 4 Floppy drives, VT100 terminal

Built by:
Ivan Clark
Melbourne PC User Group

ASK QUESTIONS BUT PLEASE DO NOT TOUCH EXHIBITS



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Talking Billy Bones

Animatronic Halloween Prop

John Shirt Version 4 Solar Tracker Reflector Mirror

John had dramas with his solar tracker as he had damaged it just a week before and needed to repair it for the show. It has been heavily modified since its last showing with vast improvements in the programming (Arduino Nano powered)



Brian Davis 3D printer.. Creality Ender 3

Brian was printing trolley tokens for visitors to our stand. This little amazing printer produced excellent first up prints and costed Brian less than \$230 delivered from eBay when he bought it.



Phil Lew Scrolling LED Matrix Sign...

This scrolling sign was a long term project that was to be available for last year's exhibition and was a last minute decision to get it done. So in between organising / transporting stuff and stand set up over a period of twelve hours parts were fabricated and finally all the parts were put together the night before the exhibition opened. The Arduino code was only loaded, modified, debugged just before leaving for the show Saturday morning.



The rest of our display consisted of many photos of our workshop facilities which featured Brian in our garage work area. All photographic image composition work was by George Skarbek.

