



# YWCA Canberra Computer Clubhouse

The Computer Clubhouse is a high tech digital studio where Tuggeranong youth collaborate with industry mentors to design, create, and pursue their passions.



*Clubhouse Members getting creative with 3D modelling and game design*

## An update from our Clubhouse Coordinator: Lach Howarth

In the past month I've been doing a lot of game design with Clubhouse Members using Scratch, a fun piece of software that allows you to program your own interactive stories, games, and animations.

Educators have been supporting Scratch creators since 2007, such as K-12 classroom teachers, computer science researchers, librarians, museum educators, and parents.

Scratch helps young people learn to think creatively, reason systematically, and work collaboratively — essential skills for life in the 21st century.

You can check out some of the work being produced by Clubhouse Members here: <http://scratch.mit.edu/studios/498326>

3D design and printing is also very popular with our Members, and some have been adding Blender to their repertoire as well as Sculpttris.

Thanks to our friends at Bing Lee, we now have two Canon 600Ds cameras at the Clubhouse. This means that we've

been experimenting with indoor and outdoor digital photography, as well as doing some photo editing with GIMP.

In addition, one of our new Clubhouse Mentors, Sharen Scott donated a digital video camera, and our first piece of wireless tech, an iPad mini! We're really looking forward to Sharen's sessions on how to plan, produce and edit a piece of video.

Finally, we're super excited to have received a littleBits workshop set, which was generously donated by Dale at General Repair Co, another new Clubhouse Mentor.

Dubbed "LEGOs for the iPad generation", littleBits produces award-winning electronic modules, ranging from the very simple (power, sensors, LED) to the complex (wireless, programmable).

But littleBits isn't just for young people, it's a useful tool for engineers for prototyping, educators for inspiring the next generation problem-solvers, or designers who have no background in electronics or engineering.

The other great thing about littleBits is that it's open source and is building a community of contributors who experiment, share online, and learn from each other's creativity. You can find out more at: [www.littlebits.cc](http://www.littlebits.cc)

Finally, over the coming weeks we'll be working with the team at Coordinate to shoot and edit a video that tells the story of our Clubhouse. The video will be screened at our Grand Opening event, which you can find out more about below.

## Clubhouse Grand Opening

The YWCA Canberra team and Clubhouse Members are busy working on plans for our Grand Opening event on 10 October. At this special event, YWCA Canberra staff, board, partners and friends will celebrate the launch of the Clubhouse.

Our talented Clubhouse Members will show off their latest creations, and Frances Crimmins, YWCA Canberra Executive Director, and Gail Breslow, Director, Intel Computer Clubhouse Network in Boston will talk about the local and global impact of this important initiative.

To make a time to visit the Clubhouse, please contact Joanna Allebone, YWCA Canberra Director of Corporate Relations and Communications at: [joanna.allebone@ywca-canberra.org.au](mailto:joanna.allebone@ywca-canberra.org.au)



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*Computer Clubhouse Mentor, Dale Rogers*



*Computer Clubhouse Mentor, Sharen Scott*

## Meet our mentors

**We're excited to introduce you to our first fabulous Clubhouse mentors, Dale Rogers and Sharen Scott. Read on below to find out more about what makes them tick, and their plans for working with our talented members.**

### A chat with Dale Rogers

**What personal and professional characteristics do you bring to your role as a mentor?**

I think my most defining characteristic is that I am insatiably curious about how things work.

I grew up with my grandparents. From them I learned to make things. Everything in our house was made, found and repaired or bartered. My grandfather is the person I admired the most. He taught me that there is nothing anyone can't do themselves with a little ingenuity and some hard work.

As a young boy I rebuilt bicycles and modded scooters with whipper snipper motors. Most things that I pulled apart never worked again. As a teenager I resprayed cars and rebuilt engines. I never did well at school and would wag

as often as I could get away with. My family organised an apprenticeship as an electrician for me before I turned 15. I was not going to finish school in any case.

When I finished my apprenticeship I had started a family and, to support them, I thought it best to try and "make the big money in the mines." I went to Olympic Dam and worked in construction and maintenance at the mine and mineral processing plant. I spent 10 years at Olympic Dam before I returned to Canberra.

The professional challenges in mining and processing are like nothing I have done since. The environment is so harsh, nothing lasts long, everything needs fixing and modifying to withstand tough treatment. Every problem had a solution that could be fixed with a welder, lathe, milling machine and the right combination of sensors and controls.

Sometimes the first thing we did with brand new machinery was pull it apart to reinforce it or make it work within our context.

I didn't know the words but I was really into Human Centred Design. I was always disappointed by machinery with confusing controls or complex safety

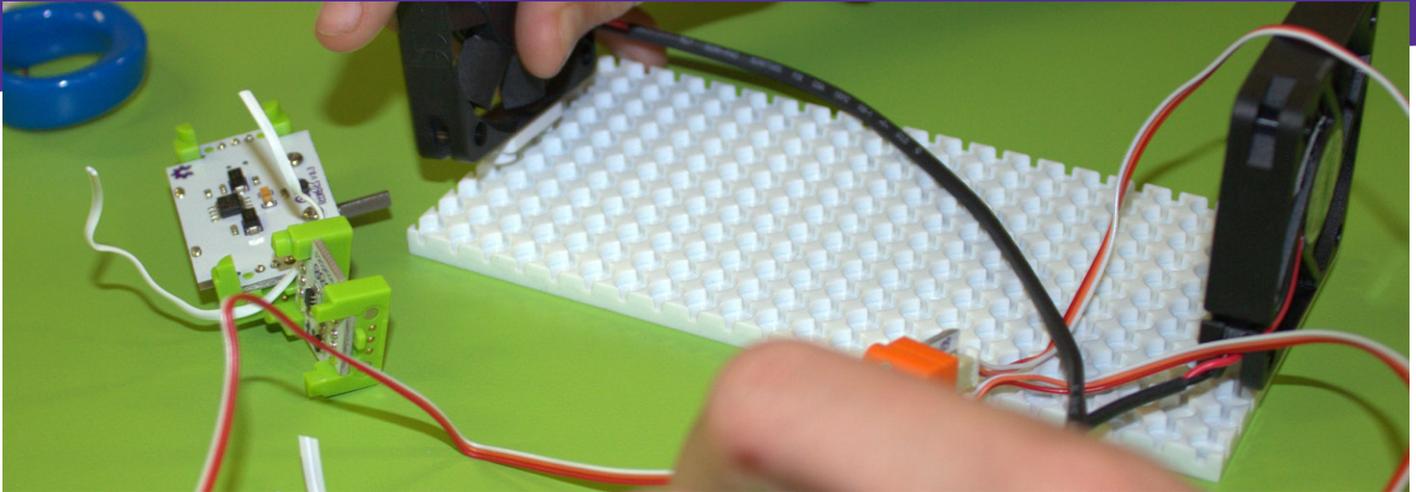
systems. I was always trying to make machines fit people and not the other way around.

When I came to Canberra I got involved with warehousing, automation and robotics as well as integrations with business systems. Then, because I was in Canberra surrounded by highly complex political machinery, I became interested in law and politics.

Really, all I wanted to do in law was pull the covers off and figure out how the machine works. But I learned much more. A formal education is massively liberating and empowering and all the more sweet because at 15 I could never have imagined it being possible.

Now, I run my own business and I love that I spend one day out in the weather digging trenches for an underground power conduit and the next developing the information architecture to support a restaurant Point Of Sale menu.

On other days I work on developing marketing strategies and automating social media content. Running my own business also means I can chose to work on the things I enjoy and prioritise the opportunities I think are important.



*Building and creating with littleBits*

## **What attracts you to volunteering, particularly with young people?**

I really enjoy keeping my hands busy and volunteering lets me meet people in a constructive way where there is common purpose or a goal. I'm not really into sports and prefer to spend my leisure time in activities that make things that are useful, or not useful as is often the case. The skills that I learn or exchange with others are always the best part. I also learn best by doing, so volunteering lets me learn by doing things I wouldn't normally do.

I like the way young people think. The older I get, the more solutions I discover, the more that I become attached to my favourite formulas. I'm getting set in my ways.

When young people approach a problem they use their unique experience and youthful perspective to discover new ways of solving problems. The solutions that young people make don't work all the time and might not be best practice but they are often innovative and creative.

## **What inspired you to become a Computer Clubhouse mentor, and what are you hoping to gain from the experience?**

I was introduced to the Computer Clubhouse through my networks in TEDxCanberra. I liked the idea of a place for young people to go and experiment with technology.

I think places like Computer Clubhouse provide confidence in tinkering and hacking with real world 'adult' tools and

that confidence in managing and using tools is needed to find a place in the world.

I'll gain a lot of satisfaction helping members develop their own cool projects. I will be completely stoked if members can develop a project to take to a robotics or electronics competition.

I'm also interested in YWCA Canberra's role in the Computer Clubhouse and the opportunity to support young women to learn trade and engineering skills and help young men to express themselves through making. I think I'm going to have some fun building stuff too.

## **What kinds of skills and experiences are you planning to share with our Clubhouse Members?**

I want to offer Clubhouse members introductory electrical and electronics skills and help them understand the role of electronics in automation, robotics and process controls.

I can also offer members introductory skills in integrating different technologies and help members understand how basic digital integration can be developed into more complex systems that support human centred design. Mostly, members should discover their own projects and I will help them explore the ways that their project could be achieved.

My business is growing and, in time, I may need to employ an apprentice electrician or trainee information designer. I would like to see keen

Clubhouse members grow their own relationships and networks with me and my colleagues so that they can achieve those types of roles.

I also have networks with electronics engineers, software engineers, PHD researchers and other academics at the School of Engineering at UNSW@ADFA.

I want to show members the beginning of a path into engineering and provide insight into where the path could lead.

## **A chat with Sharen Scott**

### **About you, in a nutshell!**

I work primarily in the field of Design Strategy and Service Design using a holistic citizen centric end-to-end approach. I first started getting into design thinking and strategy informally as a child. My dad really encouraged me to be curious and try new things, and then I got into the arts side of things, with film and production.

Currently, I am working on setting up my own consultancy, where I'll work across all sectors sharing my wide range of expertise. I also volunteer for TEDxCanberra as the Production Manager, and the Government Liaison Lead for GovHack.

### **What drives you to take time out of your busy schedule to volunteer with young people?**

Getting involved in volunteer activities can create a ripple effect with positive impacts for the wider community.



Photograph taken by a Clubhouse Member



Fun with lego

Volunteering can really transform the lives of others from one generation to the next.

I have an openness to alternative ideas, and an inquisitiveness to understanding the foundation of other people's views.

Diversity and inclusiveness bring many benefits and create an atmosphere in which all people feel valued and respected and have access to the same opportunities.

I have volunteered for Camp Challenge for a number of years, and have also volunteered for other socially inclusive foundations for extensive periods of time.

I think I get more out of the people I help through volunteering than they get from me – their resilience and strength teaches me a lot.

**What inspired you to become a Computer Clubhouse mentor, and what are you hoping to gain from the experience?**

When I first heard about the Computer Clubhouse model, I thought it was such a great way of giving young people the chance to play with technology, and to be creative. I wanted to use the breadth of my expertise and experience to contribute to the Clubhouse.

I think the Clubhouse celebrates uniqueness and belonging: by giving young people a sense of uniqueness and recognising them for their distinct talents and skills they bring to the community, they feel they belong when they share important commonalities.

Rather than applying a text book approach that gives the impression that knowledge is constructed of static ideas, facts, and definitions, the Computer Clubhouse provides an alternative model.

The Clubhouse is all about interactive experimentation and encouragement of curiosity, providing a stable space for young people to become creative and flexible thinking individuals.

**What are some of the skills and industry linkages you're hoping to offer our Clubhouse Members?**

I hope to encourage Clubhouse members to always learn something new - truly engage in different points of view, and validate unique perspectives.

I want to encourage young people to believe in themselves. By reversing roles, mentors not only facilitate development but model the act of taking a different perspective, something that is critical to working effectively in diverse communities.

I'm really excited to get the multimedia suite up and running, to show you don't have to hardcode a website to work in tech. There's also film, graphic design, photography – the arts side of things.

I want to work with the young people on their ideas and use my breadth of skills to hopefully contribute. And if I don't know something, I'll be looking to the other mentors to help!

I think the IT and technology spaces are really interesting. There are jobs in these industries that don't even exist

yet, but which are going to become increasingly important in five or ten years time.

There are so many pathways into a career in design thinking and strategy. It's about being creative and having some experience with the technology you're interested in.

And if the path you choose is tertiary education, then having had some experience through programs like the Computer Clubhouse will make a real difference.

## Stay in touch

Did you know the YWCA Computer Clubhouse has gone social?

Connect with us online to receive regular updates from the team.

### Like us on Facebook:

[Facebook.com/YWCAComputerClubhouse](https://www.facebook.com/YWCAComputerClubhouse)

### Follow us on Twitter:

[Twitter.com/YWCA\\_CCH](https://twitter.com/YWCA_CCH)