DATTA Vic Hands-on Conference Program

Thursday 3rd December
Northern College of the Arts & Technology
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Welcome

“Maker Space (also referred to as hackerspace, hackspace, and fablab):
A creative, DIY space where people can gather to create, invent, and learn”

A Librarian’s Guide to Maker Spaces

DATTA Vic welcomes you to our annual hands-on Conference, Maker Space, and to the Northern College of the Arts & Technology (NCAT). Maker Space will celebrate the joy of making – whether you are a crafter, a hacker, a coder or a crocheter!

The program will also provide an exciting opportunity for delegates to explore best practice in new technologies, new approaches to teaching and learning, and to prepare for the New Technologies Curriculum through a range of practical and seminar-style workshops.

We are also delighted to be running our live student competition, So You Think You Can Design as a textiles event. Students from different schools will compete in a range of design challenges, from creating mood boards to full scale prototypes. These tasks will be completed throughout the day, and you’ll be able to watch the participants as they work. Thanks to Katrina Wheaton-Penniall for running this event!

SYTYCD highlights new techniques and possibilities within Product Design and Technology, as well providing both participants and spectators with entertainment and inspiration! The future is looking bright for SYTYCD, as there are plans to launch it as a national competition. Plus we’re delighted to welcome Bernina Australia and Tools for Schools on board as project sponsors.

Conference Schedule

8.00am – 8.45am      Registration, Trade Exhibition, Tea & Coffee
8.45am – 9.00am       Welcome from the DATTA Vic President
9.00am – 11.00am      Workshops/Presentations (Sessions 1 & 2)
11.00am – 11.30am     Morning Tea & Trade Exhibition
11.30am – 1.30pm      Workshops/Presentations (Sessions 3 & 4)
1.30pm – 2.15pm       Lunch, Trade Exhibition & SYTYCD Awards
2.15pm – 4.15pm       Workshops/Presentations (Sessions 5 & 6)
4.15pm               Close
## Workshop Overview

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### Session 1
9.00am – 10.00am

- Workshop 1 Maker Space by Peter Murphy
- Workshop 2 Part 1 Fibres to Fabrics by Suzanne Arnott
- Workshop 2 Part 2
- Workshop 3 Part 1 Autodesk Inventor & 3D Printing by Travis Burroughs
- Workshop 3 Part 2
- Workshop 4 Strategies to encourage young people to take up STEM careers by Caroline Dorin/Autodesk
- Workshop 5 Part 1 The Power of Arduino & Raspberry Pi by Seven Vinton
- Workshop 5 Part 2
- Workshop 6 Part 1 Shape it! Make it! Rigg Design – by NGV
- Workshop 6 Part 2
- Workshop 7 Part 1 Woodturning Safety, Techniques & Project Ideas by Stephen Hughes
- Workshop 7 Part 2
- Workshop 7 Part 3
- Workshop 8 Part 1 It is Here! The new F-10 Curriculum for Victoria by Leanne Compton

### Session 2
10.00am – 11.00am

- Workshop 9 Maker Space by Peter Murphy
- Workshop 10 OH&S, the Classroom & You by Andrew Nicholls
- Workshop 11 STEM Classroom Experiences by Keysborough College

### Session 3
11.30am – 12.30pm

- Workshop 12 Maker Space by Peter Murphy
- Workshop 13 Part 1 Wearable Technology & E-Textiles by Mehrnaz Shoushtarian, IEE Women in Engineering
- Workshop 14 Part 1 Solid Edge and 3D Printing by Michael Slinger (See session 6 for part 2)
- Workshop 15 Infrared Controlled Microcontroller by Pat McMahon
- Workshop 16 Part 1 Lego Serious Play by Bridgette Engeler Newbury, Swinburne University
- Workshop 17 Part 1 Wind Tunnel Challenge by Questacon
- Workshop 18 Part 1 Using 123D Circuits for Product Design by Travis Burroughs

### Session 4
12.30pm – 1.30pm

- Workshop 19 Maker Space by Peter Murphy
- Workshop 13 Part 2 Our Journey to Makerspaces...and Beyond by Andrea Hines & Cheryl Taylor
- Workshop 15 Part 2
- Workshop 16 Part 2
- Workshop 17 Part 2
- Workshop 17 Part 4
- Workshop 18 Part 2

### Lunch & So You Think You Can Design Awards

### Session 5
2.15pm – 3.15pm

- Workshop 21 Part 1 Lego Mindstorms EV3 Basics to Playing Robocup by Brian Thomas
- Workshop 21 Part 2
- Workshop 22 Part 1 Introducing Dudes by Faye Moriarty
- Workshop 22 Part 2
- Workshop 23 Welding in the Technology Classroom by Brendan Johnston
- Workshop 24 Part 1 Silver Smithing Jewellery Introduction by Rob Kayler-Thomson & Nicola Perkins
- Workshop 24 Part 2
- Workshop 25 Part 1 Wood Turning Essentials by John Junor
- Workshop 25 Part 2
- Workshop 26 Google Cardboard by Anthony Gasson
- Workshop 27 Part 1 Apps for Tech by Suzanne Arnott
- Workshop 27 Part 2
- Workshop 28 Part 1
- Workshop 28 Part 2
- Workshop 28 Part 3

### Session 6
3.15pm – 4.15pm

- Workshop 21 Part 2
- Workshop 22 Part 2
- Workshop 24 Part 2 Solid Edge for 3D Printing by Michael Slinger (See session 3 for part 1)
- Workshop 24 Part 2
- Workshop 25 Part 2
- Workshop 29 The Drawing Challenge by Jill Livett
- Workshop 27 Part 1
- Workshop 28 Part 2

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Note: Sessions include a variety of workshops covering different topics such as technology, design, and STEM education. Each workshop is facilitated by experts in their respective fields, aiming to provide practical and engaging learning experiences.
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## Workshops

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### Workshop 1
**Maker Space with Peter Murphy**

9am – 10am (Session 1)
Subject Area: ALL
Suitable for: ALL

Drop in to find out how the Maker Movement is transforming Design and Technology education across the world. Try a range of activities, from simple design challenges, fabric dyeing and robotics, or spend time with our trade exhibitors trialling their products and services. Watch the SYTYCD–Textiles finalists competing live and experience Vex Robotics – one of the world’s largest competitive robotics systems, and a great platform for teaching hands-on STEM in the classroom.

*Peter Murphy is President of DATTA Vic. He trained as an industrial designer in the UK and is now a Product Design & Technology teacher at Northcote High School, where he runs a regular community maker space. He was part of the 2011 PD&T VCE review panel, has published teacher support material for VCE Unit 1 PD&T and is the creator of So You Think You Can Design. Peter has also been part of the VCAA expert panel reviewing the Australian Curriculum.*

### Workshop 2
**Fibres to Fabrics by Suzanne Arnott**

9am – 11am (Runs over sessions 1 and 2)
Subject Area: Textiles
Suitable for: Primary, Secondary, VCE/VET/VCAL

Exploring how wool can be show students the processes used to create fabric. Starting with a drop spindle, spinning the wool fibres into yarn. Then using spun wool as well as commercial wool and other items to create woven and knitted fabric. This is a unit Suzanne does with her VET class and has done with VCE over the years. It really does help them get a better understanding of how fabric is made. **Participants should bring their own art smocks or aprons.**

*Suzanne has been involved in teaching textiles from years 7 – 12 since the 1980’s. She loves the grass root traditions and peacefulness that spinning, weaving and knitting can bring. She is currently teaching Textiles at most year levels, including VCE PDT and VET Applied Fashion Design.*

### Workshop 3
**Autodesk Inventor & 3D Printing by Travis Burroughs**

9am – 11am (Runs over sessions 1 and 2)
Subject Area: Wood, Metal & Plastics
Suitable for: All/General

The workshop will focus on using Autodesk Inventor to generate simple models for 3D printing. Attendees will have an opportunity to model a part using Autodesk Inventor, export a part to .stl format and use Slic3r to generate a printable g-code. Skills gained from this workshop will be transferable to the Australian Design and Technology curriculum, as well as general 3D for home, work or maker-space use.

*Travis has been teaching Technology for the past 9 years. The main focus of his teaching has been graphic design, electronics, engineering and robotic. Autodesk products have been a cornerstone to all of his teaching areas.*

### Workshop 4
**Strategies to Encourage Young People to take up STEM Careers by Caroline Dorin, Autodesk**

9am – 10am (Session 1)
Subject Area: ALL
Suitable for: All

This round-table session will utilise the experience of the attendees at this conference to discuss why young people are not taking up STEM careers and identify activities that can be undertaken to reverse the trend. Particular focus will be placed on social media campaigns and other internet-based technologies.

*Caroline Dorin is a Principle User Experience (UX) Designer for Autodesk - a world leader in 3D design software for entertainment, natural resources, manufacturing, engineering, construction and civil infrastructure. With over 10 years in user experience, learning experience and management, Caroline currently works on the “Moldflow” suite of simulation products for the plastic injection molding industry.*
Workshop 5
The Power of Arduino & Raspberry Pi by Seven Vinton
9am – 11am (Runs over sessions 1 and 2)
Subject Area: Systems Engineering & Electrical Engineering
Suitable for: Secondary, VCE/VET/VCAL
This hands-on workshop is designed to provide an insight into the use of the new breed of micro-controllers and mini computers available in today’s market and how they can be applied within the learning environment. It will allow participants to build applications from the very basic up to advanced, and provide knowledge on: hardware, software interfaces, support communities, robotics, data-logging and associate computer codes. It also will briefly cover the ‘Internet of Things’ and how computer coding and micro-controllers fit into the wider context of life and careers.

Seven has been teaching for 16 plus years in the areas of Arts and Technology, including several leading teacher positions. He has been experimenting with electronics since he was 7 years old and is self-taught in the use of Arduino and Raspberry Pi technologies. He is currently the leader of professional learning and curriculum at Oberon High School, and runs his own YouTube channel and website: https://www.youtube.com/channel/UCjxo7WuMO-4xMRy_hqgeWaQ Seven is currently studying Matlab programming online at Vanderbilt University USA.

Workshop 6
Shape It! Make It! Rigg Design by the National Gallery of Victoria (NGV)
9am – 11am (Runs over sessions 1 and 2)
Subject Area: Wood, Metal & Plastics
Suitable for: ALL
Recognising excellence in contemporary Australian design, the Rigg design Prize is the highest accolade for object and furniture design in Australia. The Rigg Design Prize 2015 showcases significant bodies of work from seven outstanding designers - Daniel Emma, Adam Goodrum, Korban/Flaubert, Khai Liew, Brodie Neill, Kate Rhode and Koskela in collaboration with the weavers of Elco Islands Arts. This workshop will explore the work of these key contemporary Australian designers and gain insights into their innovative practice by designing and making a functional and decorative object working to a design brief using Plastimake - an easy-to-use mouldable plastic that you can soften in hot water and shape with your bare hands. It is non-toxic, super-strong, reusable, lightweight and biodegradable.

The National Gallery of Victoria (NGV) is the oldest and most visited gallery in Australia. Situated over two magnificent buildings – NGV International and NGV Australia – the Gallery hosts a wide range of international and local artists, exhibitions, programs and events; from contemporary art to major international historic exhibitions, fashion and design, architecture, sound and dance.

Workshop 7
Woodturning Safety, techniques & Project Ideas by Stephen Hughes
9am – 1.30pm (runs over Sessions 1, 2, 3, 4)
Subject Area: Wood, Metal & Plastics
Suitable for: Secondary/VCE/VET/VCAL
This is a hands-on workshop on how to turn on the wood lathe safely, how to sharpen chisels and gouges, scraping and cutting techniques, and some simple project ideas for students.

Stephen has been teaching woodturning and Design Technology in Secondary and Adult education for the past 35 years and uses the lathe in many student projects.

Workshop 8
It is Here! The New F-10 Curriculum for Victoria by Leanne Compton
9am – 10am (Session 1)
Subject Area: ALL
Suitable for: Primary, Secondary
Leanne will provide an overview of the new curriculum, with a focus on Design and Technologies. Her session will assist you with the process of transitioning to the new curriculum by unpacking the Content Descriptions and Achievement Standards from F-10. Come along and start thinking about how to begin implementing the curriculum for 2017.

Leanne Compton is the Curriculum Manager, Design and Technologies at the VCAA. She has responsibility for a range of studies including Product Design and Technologies and Systems Engineering.

Workshop 9
Maker Space by Peter Murphy - For a description of this session, see Workshop 1
10am – 11am (Session 2)
Subject Area: ALL
Suitable for: ALL
Workshop 10
OH&S, the Classroom & You by Andrew Nicholls

10am – 11am (Session 2)

Subject Area: ALL
Suitable for: ALL

This workshop will focus on answering all of those questions you've ever wanted to ask about OHS, the technology classroom and you. Through engaging discussion we will explore aspects of the OHS Safety Act, the regulations, codes of practice, compliance codes, and the Australian Standards that relate to the technology classroom. From appropriate footwear to the spacing of machinery and the use of risk assessments to mitigate hazards, this workshop will ensure you have all the information you need to minimise risk in your technology classroom.

Andrew Nicholls is a qualified Industrial Designer, Leading Teacher and OHS specialist. He worked in a number of design related industries before returning to University to complete a Post-Graduate Diploma of Education. Andrew has worked for a number of government schools in both rural and urban settings. His understanding and professional educational and design practices have been utilised to educate students in Design & Technology, Art, Visual Communication, History and OH&S. Andrew has also worked on curriculum documentation, examination writing and marking and folio cross-marking. He is currently completing a Masters in Occupational Health, Safety and Environmental Management and a Masters in Education.

Workshop 11
STEM Classroom Experiences by Keysborough College

10am – 11am (Session 2)

Subject Area: Wood, Metal & Plastics/Systems Engineering
Suitable for: ALL

Teachers from Keysborough Secondary College describe and reflect on their practice of STEM subjects and activities.

Keysborough College is a dual campus secondary, low SES, college located in South East Melbourne that is embracing STEM education. This year they built a designated STEM building and offer a unique STEM program to students on both campuses. They also are incorporating STEM in other curricula and extra-curricular activities.

Workshop 12
Maker Space by Peter Murphy - For a description of this session, see Workshop 1

11.30am – 12.30pm (Session 3)

Subject Area: ALL
Suitable for: ALL

Workshop 13
Wearable Technology & E-Textiles by Mehrnaz Shoushtarian, IEE Women in Engineering

11.30am – 1.30pm (Runs over sessions 3 and 4)

Subject Area: Textiles/Systems Engineering
Suitable for: Secondary/VCE/VET/VCAL

This workshop will provide an introduction to wearable electronics. Participants will use the LilyPad Arduino, a sewable microcontroller, to put together simple circuits using sensors and LEDs and sew them onto fabric using conductive thread. The Arduino software will be used to run simple programs. Participants should bring a pair of scissors & 30 x 30cm fabric piece.

Mehrnaz Shoushtarian has a PhD in Biomedical Engineering and volunteers as Vice Chair of the Women in Engineering Affinity Group in Victoria (part of the Institute of Electrical and Electronics Engineers, IEEE). WIE has been running these workshops since November 2014. They had an Energised Fashion Runway in August 2015 as part of National Science Week to showcase designs from these workshops. For further info see http://wie.ieeevic.org/.

Workshop 14
Solid Edge and 3D Printing by Michael Slinger

11.30am – 12.30pm (Session 3) and 3.15pm – 4.15pm (Session 6)

Subject Area: Wood, Metal & Plastics/Systems Engineering
Suitable for: Secondary/VCE/VET/VCAL

This workshop will show how to use SolidEdge (a free-for-student use, 3D modelling software package) to produce 3D printable parts. It will run in two parts - one for the set up and modelling (session 3) and then the second (session 6), for post-processing techniques.

Michael is a Systems Engineering teacher working at Beaconhills College in Berwick. During his time as an Industrial Designer, he worked extensively with 3D modelling software and 3D printed parts in developing prototypes for his product designs. As this area has gained greater prominence recently, these processes engage students and give them more tools for designing.
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Workshops

Workshop 15
**Infrared Controlled Microcontroller** by Pat McMahon

11.30am – 1.30pm (Runs over Sessions 3 and 4)
Subject Area: Systems Engineering
Suitable for: Secondary/VCE/VET/VCAL

Participants will build and take away their own Picaxe 14M2 infrared controlled microcontroller. They will view a range of eye catching student models applications including infrared controlled tanks, buggies, 10 LED lights, 28 tunes, LED light tower, basketball counters & 7 segment display, LED Cube and Pat’s latest development - an Infrared controlled "Rock & Roll Marble Machine"

Pat has run workshops for over 500 DATTA Vic participants over the last 10 years. He has been honoured to have received 5 Australian, State and Territory, Regional Innovative Teacher and various Teacher of the Year Awards. Pat is passionate about student engagement and developing interesting, higher order thinking skilled and eye catching models to share.

Workshop 16
**Lego Serious Play** by Bridgette Engeler Newbury, Swinburne University of Technology

11.30am – 1.30pm (Runs over Sessions 3 and 4)
Subject Area: All
Suitable for: All

In this hands-on workshop learn more about how LEGO® SERIOUS PLAY® can improve creative thinking, visualisation, storytelling and problem solving skills. The LEGO® SERIOUS PLAY® Method is a facilitated meeting, communication and problem-solving process. Each participant builds their own 3D LEGO® model in response to the facilitator's questions using specially selected elements. These 3D models serve as a basis for group discussion, knowledge sharing, problem solving and decision making.

Course coordinator at the Swinburne University School of Design and practising academic, Bridgette teaches in the areas of design thinking and design management, cross-cultural design strategy and strategic foresight. Prior to joining Swinburne, Bridgette worked on myriad design projects, from new product and brand launches to corporate rebrand initiatives and innovation projects in Australia, Asia, North America, and the Middle East. Bridgette is a certified LEGO® SERIOUS PLAY® facilitator

Workshop 17
**Wind Tunnel Challenge** by Questacon

11.30am – 1.30pm (Runs over sessions 3 and 4)
Subject Area: Wood, Metal & Plastics/Systems Engineering
Suitable for: All

This workshop will help you to challenge student ideas about STEM subjects and increase their confidence in trying new ideas through the innovation process - think, make, try and refine. Using a Wind Tunnel participants are challenged to engineer an object using limited materials. This is a hands-on workshop where scientific concepts such as air resistance and lift are reinforced through the innovation process rather than being the main driver for the workshops.

Working with a range of partners, the Questacon Smart Skills Initiative engages young people in design thinking, technology, creativity and innovation through a range of programmes including the Smart Skills national touring program, the Invention Convention and the Maker Project. The Questacon Smart Skills Initiative operates in metropolitan, regional and remote areas across Australia. It is funded jointly by the Australian Government and The Ian Potter Foundation.

Workshop 18
**Using 123D Circuits for Product Design** by Travis Burroughs

11.30am – 1.30pm (Runs over sessions 3 and 4)
Subject Area: Wood, Metal & Plastics/Systems Engineering
Suitable for: All

During this workshop Travis will be covering how to design and program a circuit with 123D Circuits as well as how those circuits can fit into the Design Technology curriculum.

Travis has been teaching electronics for the past 5 years. He has always had a struggle finding a means of teaching electronics that don’t involve thousands of tiny little parts and a magnifying glass for trouble shooting! 123D has been a great virtual aid that has increased the learning and productivity of his students.

Workshop 19
**Maker Space** by Peter Murphy - For a description of this session, see Workshop 1

12.30pm – 1.30pm (Session 4)
Subject Area: All
Suitable for: All
Workshop 20
Our Journey to Makerspaces...and Beyond by Andrea Hines & Cheryl Taylor

12.30pm – 1.30pm (Session 4)
Subject Area: All
Suitable for: Secondary/VCE/VET/VCAL

Over the past two years Galen Resource Centre has embarked on a program of introducing Makerspaces into their libraries. Like all good journeys, theirs began with an idea – a PD day where the topic of Makerspaces was on the agenda. They listened with growing enthusiasm and the trip home on the train was abuzz with excitement and big ideas. But as always there was the problem of getting it started . . . and this is their story (so far). The journey has been one of real discovery for all as they trialled ideas, changed approaches, reassessed current practice and did their best to figure out how to integrate creative and learning spaces into their limited library space. They will discuss the need for student input, staff collaboration and ideas of how to create the momentum required. They will outline their planning, the successes and the failures, giving a peek into where they hope their journey will take them in the coming year.

Andrea Hines is a Library Technician in the Senior Library team at Galen Catholic College in Wangaratta. She describes herself as having an inquisitive mind. Making and sometimes breaking things to understand how they work has been part of her personality since childhood. Andrea loves finding solutions to problems, working in a progressive team and thinking big. She also enjoys working with students and staff towards desired outcomes, finding new ideas for library service provision and sharing knowledge with like-minded people. In 2014 Andrea was the Winner of the IEU Jan Bavinton Memorial award.

Cheryl Taylor is a library technician at Galen Catholic College, co-educational secondary school with 1200 students. She is passionate about supporting staff and students as they develop skills and strategies to succeed in the digital world.

Workshop 21
Lego Mindstorms EV3 Basics to Playing Robocup by Brian Thomas

2.15pm – 4.15pm (Runs over Sessions 5 and 6)
Subject Area: Systems Engineering
Suitable for: All

Join Brian Thomas, who has worked with LEGO robotics for over 25 years, to discover how easy it is to compete in one of the world’s largest educational tournaments. Start with basic programming principles of LEGO Mindstorms EV3 and progress to using sensors to chase an infra-red soccer ball around a field.

Brian is the Founding Chair of RoboCup Junior International, the National Coordinator of World Robot Olympiad and Creator of WRO GEN II Football, which is played in over 50 countries. He was awarded the BHP Billiton Science Teacher’s Award in 2004, and Engineers Australia Engineering Education Excellence Award Winner in 2012.

Workshop 22
Introducing Dudes by Faye Moriarty

2.15pm – 4.15pm (Runs over Sessions 5 and 6)
Subject Area: Textiles
Suitable for: Secondary

This hands-on workshop is a complete unit of work, designed to explore and demonstrate the understanding of design elements and principles through the creation of a knitted textile product. Developed for the middle school Design, Creativity and Technology curriculum. No previous knitting skills needed.

Faye is an experienced VCE Product Design and Technology Teacher, VCAA Exam Assessor and Conference Presenter who now finds herself thrust into the realms of Middle School Textiles and the development of AUSVELS curriculum. She has set her creative juices flowing and enjoys inspiring other like-minded teachers to share her passion in engaging students in the classroom.

Workshop 23
Welding in the Technology Classroom by Brendan Johnston

2.15pm – 3.15pm (Session 5)
Subject Area: Wood, Metal & Plastics
Suitable for: Secondary

Welding of metals in Technology areas can be interesting and informative. Brendan focuses his lessons on the experience of learning as well as design and creativity.

Brendan is a trade qualified sheet metal worker who spent 22 years industry before completing his Bachelor of Education/Technology at Ballarat Uni. He has been a classroom teacher for 6 years at Mount Clear Secondary College. He mainly teaches in metal fabrication classrooms and VCAL.
Workshops

Workshop 24
Silver Smithing Jewellery Introduction by Rob Kayler-Thomson & Nicola Perkins
2.15pm – 4.15pm (Runs over Sessions 5 and 6)
Subject Area: Wood, Metal & Plastics
Suitable for: Secondary

In this session you will learn to make a sterling silver ring. It is the Geelong College’s introduction for a jewellery unit from year 8-9 Design Technology. In it, they go through the tools and equipment required and let you use them to create a ring from scratch. They will demonstrate the advancements from the unit and what you can get your students doing.

Rob Kayler-Thomson currently teaches Units 1-4 Product Design & Technology in all mediums at the Geelong College. He has a wealth of knowledge and experience teaching Design & Technology at Secondary level. Rob has been an examiner and reviewer with the VCAA and has been involved with Top Designs. He has been a long time member of DATTA Vic and is currently the Treasurer. Nicola Perkins is a teacher from England, who has been teaching Product Design and silver smithing from junior to year 12 for 6 years in the UK and 2 years here in Geelong.

Workshop 25
Wood Turning Essentials by John Junor
2.15pm – 4.15pm (Runs over sessions 5 and 6)
Subject Area: Wood, Metal & Plastics
Suitable for: Secondary

A session on the wood-turning basics - shaping/grinding of tools, cutting/scraping methods, determining what speed, spindle turning and forming basic shapes. Participants will make a spindle turned sampler. Participants should bring a set of wood turning tools from their schools.

John has been a Technology teacher since 1979. He completed his training at Melbourne State College but learnt about wood turning from a former patternmaker who taught with him at Coburg High School. He has had an extensive career at 10 different schools and is currently at Lalor SC. In 2010 and 2011 he worked for a company building wooden boats and until recently has taught wood turning privately.

With over 20 years of experience in machine safety guarding within educational facilities, CPR SafeInd is your one stop shop for all your machine safety guarding compliance issues. Over this time we have developed a range of standard products for workshop machinery typically found in technology studies workshops. This includes guarding for lathes, mills, drill presses, grinders, guillotines and many more machines. For a full range of products available please visit our website where you can download a copy of our schools catalogue.
Workshop 26
Google Cardboard by Anthony Gasson
2.15pm – 3.15pm (Session 5)
Subject Area: Systems Engineering
Suitable for: All

In this workshop participants will be able to construct their own virtual reality headset using a Google Cardboard template, discuss the future of virtual and augmented reality and brainstorm its use within the classroom. Bring your own smart phone with access to app store or google play. Devices with a 5” Screen are recommended for best results.

Anthony Gasson is the Technology Studies Program Manager at NCAT and teaches Engineering. With interests in emerging technology, computer programming and manufacturing he fits the description of a "Maker."

Workshop 27
Reticules and Receptacles! by The National Gallery of Victoria (NGV)
2.15pm – 4.15pm (Runs over sessions 5 and 6)
Subject Area: Textiles
Suitable for: Secondary

Australian Fashion: 19th Century to Now celebrates the breadth of Australian fashion featuring works from over 85 Australian designers and makers. This presentation and workshop will explore the changing silhouettes and trends that have characterised our unique fashion style, by designing, embellishing and creating your personal reticule inspired by one of the outfits within the exhibition.

The National Gallery of Victoria (NGV) is the oldest and most visited gallery in Australia. Situated over two magnificent buildings – NGV International and NGV Australia – the Gallery hosts a wide range of international and local artists, exhibitions, programs and events; from contemporary art to major international historic exhibitions, fashion and design, architecture, sound and dance.

Workshop 28
Apps for Tech by Suzanne Arnott
2.15pm – 4.15pm (Runs over sessions 5 and 6)
Subject Area: All
Suitable for: All

This session will be a hands-on look at how to create a digital portfolio using your iPad or other mobile device. You will explore suitable apps and cloud based functions.

Suzanne is a Product Design and Technology teacher with a focus on Textiles and Fashion, as well as having a passion for teaching years 7 – 12 over the years in a range of creative digital technologies. She was instrumental in developing processes for apps across the college at Sandringham College. She loves the freedom mobile devices give to students to learn anywhere any time.

Workshop 29
The Drawing Challenge by Jill Livett
3.15pm – 4.15pm (Session 6)
Subject Area: All
Suitable for: All

In the busy classroom, when do you have time to enjoy design drawing? In the spirit of 'maker spaces', in this workshop you have time and space to develop your ideas and drawing skills, and to think "what if...?". A series of design challenges will be given to you, some short, some longer, and a range of drawing media will be available for you to explore and have fun.

Jill has been around DATTA Vic and D&T teaching for a long time and still finds it exciting. She is currently the Vice President and Resources Manager of DATTA Vic. She teaches in the Wood, Plastics and Textiles areas, and has presented and written support texts for VCE Product Design and Development study design.

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Northern College of the Arts and Technology
NCAT- Trades and Technologies Centre

NCAT: Trades and Technologies
T1- MAC computer room
T2- Computer room
T3- Computer room
T4- Casting Technologies/Computers
T5- Casting Tec/Tec room
T6- Casting Tec/Pattern shop
T7- Casting Tec//Foudry
T8- CNC & Laser/Specialist
T9- Engineering
T10- Shared Area
T10a- Plumbing
T11- Plumbing store
T12- B/C machine room
T13- Building Construction
T14- B/C computer room
T15- Electro/ Computer
T16- Electro classroom
T17- Electro Workshop
T18- Electro classroom
T19- Electro classroom
T20- Electro/ Computer
Mezzanine -1st Floor Solar/wind work area

NCAT-T Building
Main Entrance.

Office
Conference Information

Register for the Conference at www.datta.vic.edu.au

About NCAT
The Maker Space Conference is being held at NCAT, 62 Murray Road, Preston VIC 3072. Tel 03 9478 1333. Web: ncat.vic.edu.au

The Northern College of Arts and Technology caters for Year 10, VCE, VCAL, and post-secondary students seeking a specialised education in the performing arts, visual arts, design, media, trades or technologies. Industry professionals deliver innovative curriculum designs to meet current Tertiary, TAFE, and industry requirements. With one of Victoria’s broadest VET offerings, state-of-the-art facilities and a highly successful track record, the College provides a mature study environment to foster individuality and personal growth.

As a College, they recognise multiple types of intelligence. They reward practical problem solving, creativity, lateral thinking, building, fixing, designing and innovating. Every student benefits from a curriculum designed to encourage individuality and creativity. Their hands-on learning approach develops confidence, teamwork and cooperation skills for students who wish to pursue further study, apprenticeships or employment.

DATTA Vic wish to thank Raffaela Galati-Brown, Daniel Knott, Tom La and all the staff at NCAT for their help in planning and running the Maker Space conference.

Parking & Transport
There is parking available on-site at NCAT, and additional spaces available in the surrounding streets. For public transport options from your area, visit ptv.vic.gov.au

Accommodation
Mantra Bell City are offering our delegates a 10% discount on any accommodation booked for the conference. Just mention DATTA Vic at the time of booking. Tel: 03 9485 1000, email: bellcity.res@mantra.com.au www.bellcity.com.au/hotel/mantra-bell-city/

Enquiries
Contact Laura at pl@datta.vic.edu.au or 03 9349 5809 if you have any questions about the DATTA Vic Maker Space conference. For all invoicing enquiries, contact Davone on 03 9349 1538 or admin@datta.vic.edu.au.

Workshop Sessions
Workshop sessions have limited numbers – please book early to ensure your first choice. Some workshops run in 2 parts over 2 sessions – be sure to book both part 1 and part 2. Also, please make sure you note which workshops require you to bring your own materials, laptops or tablets.

Trade Exhibitors
All trade exhibitors are located in T13 along with the catering and Maker Space, allowing delegates to pursue a range of resources, materials and equipment at their leisure throughout the day. Please see the Conference Trader Listing in this program for further details of our sponsors, trade exhibitors and advertisers.

Presenters
A huge thank you goes to all of our conference presenters, for giving up their time and for sharing their skills and knowledge. We are so grateful for your contribution.

Catering
Our conference is catered by James Ray & Co The Caterers. Thanks for the lovely food! If you have any special dietary requirements, please be sure to provide details on the booking form.

Pricing
DATTA Vic Member: $245
Non-Member: $344*
Associate Member: $200
Associate Non-Member: $266*
Student: $66*

*includes DATTA Vic membership

Cancellations
DATTA Vic will refund the full fee, less an administration cost, if you cancel 4 or more working days before a workshop, seminar or conference and 50% of the fee if you cancel 1 to 3 days prior to the event.

If you register but do not attend without cancelling prior to an event you will be charged the full fee unless a medical certificate is provided.

Disclaimer
DATTA Vic will not accept liability for damage or loss of any nature sustained by participants, suppliers, agents, contractors, consultants or their accompanying persons, to their personal property as a result of the DATTA Vic Design for People conference, Trade Show or any related events.

Program is correct at the time of printing and subject to change without notice. Please accept our apologies for any inconvenience caused. Notice of cancelled sessions will be circulated to registered delegates as soon as practical.
DATTA Vic are proud to acknowledge the following supporters:

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