Activity Map 2014
www.digitalcareers.edu.au

This document provides an overview of information and communication activities, events and competitions on offer around Australia. The aim is to create awareness and stimulate interest in the possibilities available to students in the information, communication and digital technologies fields.

While every effort has been made to ensure the accuracy of the content provided, we suggest contacting the owners of each activity for the most current information available or visit their website for further details.

Program Name	Program Details
Australian Innovation Challenge Innovation awards helping drive some of the nation's best ideas to commercialisation or adoption. 7 professional categories plus a backyard category	**Acronym:** **2013 attendance:** **Duration:** Competition commences July and ends November **Age Group:** Open to both professionals and the general public **Gender:** Girls, Boys **Location:** National **Event Dates:** Entries open July, Entries close Sept, Finalisists announced weekly from Nov, Awards Ceremony Late Nov **URL:** http://www.theaustralian.com.au/innovationchallenge
Australian Informatics Competition The Australian Informatics Competition (AIC) is a one-hour problem-solving competition which seeks to identify computer programming potential; something which students might not normally have an opportunity to demonstrate. The AIC is not a programming competition and no programming experience is required. Results in the AIC often enable a talent to be discovered which is not always apparent or sought in normal classroom activities. Some questions test the ability to accurately perform procedures. Others require logical thought while the more challenging problems require the identification and application of algorithms. *Contact: Australian Mathematics Trust* *Tel: +61 2 6201 5137* *Email: aic@amt.edu.au*	**Acronym:** AIC **2013 Student attendance:** 6000 **Duration:** 1 hour **Age Group:** All high school students, separate competitions for Junior (Years 7 and 8), Intermediate (Years 9 and 10) and Senior (Years 11 and 12) (note that an Upper Primary level will be introduced in 2015). **Gender:** Girls, Boys **Location:** All participating Australian Secondary Schools **Event Dates:** Tuesday 25 March 2014, but entries close Friday 14 March 2014 **URL:** http://www.amt.edu.au/aic.html
Australian Informatics Olympiad The Australian Informatics Olympiad is a national computer programming competition held annually in early September. Students write short computer programs to solve three problems that range in difficulty. The competition does not test computer literacy or knowledge, but is focused on problem solving through programming skills. A free training program to help students learn an appropriate programming language is available through the AMT website link below. *Contact: Australian Mathematics Trust* *informatics@amt.edu.au* *Phone: 02 6201 5137*	**Acronym:** AIO **2013 Student attendance:** 300 **Duration:** 3 hours **Age Group:** All high school students (Two levels of competition, Intermediate (up to Year 10) and Senior (Years 11 and 12). **Gender:** Girls, Boys **Location:** All participating Australian Secondary Schools **Event Dates:** Thursday 4 September 2014 **URL:** http://www.amt.edu.au/aio.html
Bebras Australia Computational Thinking Challenge Bebras is an international initiative whose goal is to promote Computational Thinking among teachers and students of ages 8-17 (school years 3-12) , but also to the public. The contests are made of a set of short questions called Bebras tasks and are delivered via the Cloud. The tasks can be answered without prior knowledge about Informatics, but are clearly related to Informatics concepts. To solve the tasks, students are required to think in and about information, discrete structures, computation, data processing and algorithmic concepts *Contact: Digital Careers* *Karsten Schulz* *Karsten.Schulz@nicta.com.au*	**Acronym:** Bebras **2013 Student attendance:** N/A **Duration:** 45 minutes, usually held in November during international Bebras Week **Age Group:** Year 3 -12 **Gender:** Girls, Boys **Location:** Online **Event Dates:** March 2014 (Pilot). November 2014 (Regular Contest) **URL:** http://bebras.org/

Big Day In

The Big Day In is an IT careers conference organised, run and hosted by students for students.

Contact: *Kerrie Bisaro, ACS Foundation*
Tel: 02 8296 4444
Email: kerrie.bisaro@acsfoundation.com.au

Acronym: BDI
2013 Student attendance: approx 1500
Duration: 1 day
Age Group: Year 9,10, 11 & 12
Gender: Girls, Boys
Location: QLD, NSW, VIC, WA, SA
Event Dates: annually, inaugural event held in 2012
URL: www.thebigdayin.com.au

Club Kidpreneur

A social enterprise seeking to encourage entrepreneurial thinking in primary-aged children on a national level. Club Kidpreneur runs programs in primary schools (aligned with the Australian Curriculum) and in the community (holiday camps and after-school programs) to develop financial literacy, business acumen and a range of personal life skills.

Contact: *Lydia Scott*
Ph: 1300 464 388
info@clubkidpreneur.com

Acronym:
2013 Student attendance: In 2013 over 2,000 primary-aged children participated in Club Kidpreneur's range of programs. Since 2010, 3000+ kidpreneurs have

launched their own businesses.
Duration: Duration of $50 Challenge (in school program) is 12 weeks over term 3 each year.
Age Group: Primary
Gender: Girls, Boys
Location: Nationwide, across every Australian state. (Also in New Zealand)
Event Dates: Annual $50 Challenge for schools runs in term 3 each year. This year it will run 14 July - 26 September. Registrations close 1 May 2014.
URL: www.fiftydollarchallenge.com

Code Club Australia

The mission of Code Club Australia is to give every child in Australia the chance to learn to code by providing project materials and a volunteering framework that supports the running of after-school coding clubs.

Code Club Australia is part of the Code Club World network

Contact: *Please use the form located on the website to contact Code Club.*

Duration: ongoing
Age Group: Children aged 9 - 11
Gender: Girls, Boys
Location: Code Club Australia is a network of volunteers based throughout Australia
Event Dates: ongoing
Cost: Free, volunteer-led after-school clubs
URL: http://codeclubau.org/

CoderDojo

A global collaboration providing free and open learning to young people, especially in programming technology.

Acronym: Student attendance:
Duration:
Age Group: 6 and up
Gender: Girls, Boys
Location: International – online, Clubs in over 22 countries
Event Dates:
URL: http://coderdojobrisbane.com.au/

Computer Games Boot Camp

CGBC (Computer Games Boot Camp) is a hands-on, interactive, industry engagement event. It has evolved and diversified into far more than just games, now providing presentations, workshops, industry showcases, course information, careers and pathways.

Founded in 2009, it initially provided students who enjoyed playing games with an event where they could express their interests and meet like-minded individuals.

As a student, if you want to learn more about how games are designed and built, or have interests in other areas of multimedia and ICT; this event is ideal for you.

Contact: *Andrew Owen, Event Organiser*
Andrew.Owen@monash.edu
Phone: 03 9903 1441

Acronym: CGBC
Duration: 11am to 6pm each day
Age Group: All high school students, years 7 to 12
Gender: Girls, Boys
Location: Building 60 (Engineering Halls), Clayton Campus, Monash University
Event Dates: Saturday 22 February to Sunday 23 February, 2014
Cost: Free for high school students and eligible TAFE students
URL: https://cgbc.infotech.monash.edu/general/what-is-cgbc.html

ECOMAN

ECOMAN, is an international business simulation program, implemented in secondary schools and colleges across Australia to familiarise students with the world of business. The program is delivered by Queensland Private Enterprise Centre (QPEC), a not-for-profit organisation run by prominent business leaders whose mission is to help inform and educate teachers and young people about the central role and contribution of enterprise in our society. QPEC has been conducting ECOMAN programs for students in central and southern Queensland since 1995 and the program has been growing steadily to meet increasing demand.

Contact: *Mr Barry Hopf, Education Co-ordinator*
Telephone (07) 3816 3775 or e-mail
bhopf@bigpond.net.au

Duration: 3 days

Age Group:

Gender: Girls, Boys

Location: Brisbane, and regional centres including Cairns, Townsville, Ipswich, Redlands, the Gold Coast, Beaudesert, Kingaroy, Emerald, Gladstone and Bundaberg.

Event Dates: arranged by participating schools with ECOMAN

URL: http://qpec.org.au/ecoman.html

Endeavour (focussing on Schools Program)

The Endeavour School's Program brings Engineering to the very fingertips of school students across Victoria.

Contact: *University of Melbourne*
Email: endeavour-mse@unimelb.edu.au
Phone: +61 3 8344 6642

Acronym:

2013 Student attendance: approx. 1000

Duration: In 2013, the roadshow ran from 15 July to 2 August

Age Group: Roadshow - Primary and High School

Gender: Girls, Boys

Location: Melbourne and Victoria

Event Dates: Roadshow: one hour presentations
Adventure: Workshop and access to design expo at the University

URL: http://endeavour.unimelb.edu.au

Exploring interests in Technology and Engineering

EX.I.T.E. camps are one of IBM's diversity initiatives to help fuel young girl's interests in taking science and maths classes throughout high school. The camps are also designed to help girls understand how rewarding engineering and technology careers can be and how they offer opportunities to be creative, to become a leader and to give back to the community.

Contact: *Sharon Parr:*
E: shparr@au1.ibm.com
Lisa Marland:
E: lmarland@au1.ibm.com

Acronym: EX.I.T.E

2013 Student attendance: <100

Duration:

Age Group: Year 8 - 10

Gender: Girls

Location: Camps have been held in Sydney, Melbourne, Brisbane, the Gold Coast and Ballarat.

Event Dates: annually each summer since 2005

Twitter Feed: https://twitter.com/IBMEXITECamp

Women in IT -Diversity information:
http://www-07.ibm.com/employment/au/diversity/women.html

Press Releases:
http://www-03.ibm.com/press/us/en/pressrelease/19565.wss
http://www-03.ibm.com/press/au/en/pressrelease/28764.wss

Females in Technology & Telecommunications

A not-for-profit network whose purpose is to inspire women to achieve their career aspirations and potential at all levels and disciplines within ICT, by facilitating peer networking and support through
their programs.

Contact: *membership@fitt.org.au*
Facebook:
http://www.facebook.com/pages/Females-in-Information-Technology-Telecommunications-FITT/131291833615373

Linked in: *http://www.linkedin.com/groups?gid=65663*

Twitter: *http://twitter.com/FITT_AU*

Acronym: FITT

Membership: 4000 members across Australia in every role function and all age groups in ICT.

Founded: NSW in 1989

Age Group: Women working in the ICT industry at all sectors, job roles and seniority

Gender: Women

Location: National association

Event Dates: Ongoing - check out http://www.fitt.org.au/Events/CurrentEvents.aspx for latest events.

Other programs: Webinars, Mentoring program, networking activities, co partnering events

URL: http://fifi1248.staging-iis7-2.netregistry.net/

First Lego League

Teams of up to 10 students learn about a modern scientific problem and develop solutions for it, while having fun with robots. FLL® is a multi-part competition judged on three important elements: 1) Robot 2) Project 3) Core Values

Regional Contacts:

Adelaide:
Teresa Jankowski, exec@concept2creation.com.au

Brisbane:
David Nutchey, d.nutchey@qut.edu.au

Gladstone
Leanne Martin, lmart72@eq.edu.au

Perth
Tim Keely, t.keely@curtin.edu.au

Melbourne
Milorad Cerovac, milorad.cerovac@kds.vic.edu.au

Sydney
Luan Heimlich, luan.heimlich@mq.edu.au
Fred Westling, fred@firstaustralia.org

Acronym: FLL

2013 Student attendance:

Duration: 1 day per tournament

Age Group: 9 - 16

Gender: Girls,Boys

Location: NSW (Sydney), QLD (Brisbane, Gladstone), WA (Perth), VIC (Melbourne), SA (Perth)

Event Dates: Regional tournaments occur November – December, National tournament December

URL: http://firstaustralia.org/FLL/about

First Robotics Competition

A large-scale robotics competition, FRC® brings together students and mentors to build robots that perform in a competitive but gracious environment against teams from all over the world.

Contact: Luan Heimlich:
luan.heimlich@mq.edu.au or 02 9850 7413
Fred Westling:
fred@firstaustralia.org or 04 0360 711

Acronym: FRC

2013 Student attendance: In 2012, 6 teams from NSW, VIC, TAS and QLD competed at Duel Down Under. In 2014, 22 Australian teams will compete at the Duel Down Under.

Duration: Build commences January with the Duel Down Under held in June. In 2015, a larger competition event will be held in March/April.

Age Group: 14 - 18

Gender: Girls, Boys

Location: Duel Down Under in Sydney

Event Dates: game released early January annually

URL: http://firstaustralia.org/node/54

ICT Career Kickstarter session

The Tasmanian ICT Conference is being held on Thursday 14 August at the Hotel Grand Chancellor in Hobart.

As part of that event, ICT students from around Tasmania are invited to attend an ICT Career Kickstarter session from 10am – 12 noon.

- Students/TAS TAFE staff free entry on registration
- One hour session (10-11) with presentations from ICT leaders and professionals.
- One hour (11-12) with ICT businesses at the trade booths.
- Students who wish to stay for the remainder of the day are welcome to do so.

Contact: TasICT
Dean Winter
Executive Officer
0427 253 654
dean.winter@tasict.com.au

Duration: 10am – 12 noon.
Age Group:
Gender: Girls, Boys
Location: Hotel Grand Chancellor, Hobart
Event Dates: Thursday 14 August
URL: http://www.tasict.com/tasict-annual-conference

Internet of Things Developer Challenge!

The IoT Developer Challenge is an online contest that rewards developers who create a IoT application using Java Embedded with computer boards, devices or other IoT technologies.

How to Win
1. Create a well-implemented, innovative and useful application using java embedded with devices, boards or other IoT technologies.
2. Make a video presenting your project.
3. Fill out the submission form
   https://www.java.net/challenge/registration
   with links to your video and code.

Acronym: IoT

Age Group: any developer, student, hobbyist, and professional

Gender: Both

Location: online competition

Event Dates: Submissions begin March 3rd, 2014
Submission deadline is May 30th, 2014
Winners announced June 30th, 2014
JavaOne 2014 from Sept. 28 to Oct. 2, 2014

URL: https://www.java.net/challenge

Little Scientists

'Little Scientists' is a not-for-profit initiative of FROEBEL Australia and the "Little Scientists' House Foundation" in Germany. It has been designed to facilitate children's curiosity for science, maths and technology through child-appropriate, fun and playful experiments already in their early years. Education and care services, preschools and kindergartens that work with children from 3 to 6 years of age are invited to join the program and to become an accredited "Little Scientists' House". Teachers and educators are continuously trained through the initiative and are empowered to implement the program together with the children in their care.

Contact: Christine Schneyer
christine@littlescientists.org.au
Phone: 02 8080 0065

Project Status: Completed pilot phase with 40 education and care services in NSW. Started with 'Little Scientists' Trainer-Training in February 2014 as kick-off for the national roll out.

Duration: The participating teachers and educators from education and care services join a 6-montly 1-day hands-on 'Little Scientists' workshop and then implement the program with the children in their care.

Age Group: Kindy, Prep, 3 - 6 years of age

Gender: Girls, Boys

Location: Throughout Australia, where 'Little Scientists' Local Network Partnerships have been established. At this stage they are based in ACT, NSW and WA with more Local Network Partners to come on board soon.

Event Dates: Ongoing

URL: http://www.littlescientists.org.au/

NATIONAL COMPUTER SCIENCE SCHOOL

NCSS Summer School 2015

An intensive 10 days of computer programming, robotics, web design and related activities at the University of Sydney. No programming experience is required.

Contact: NCSS Co-ordinator
T (02) 9351 3424
F (02) 9351 3838
E info@ncss.edu.au

Acronym: NCSS

2014 Student attendance: 94 students and 15 teachers

Duration: Summer School - 10 days in duration

Age Group: Year 11 (and some Year 10) and teachers

Gender: Girls and Boys

Location: School of IT and The Women's College, University of Sydney

Event Dates: Sunday 4th - Tuesday 13th January, 2015 (10 Days)

Cost: $400 per student or teacher (including GST)
URL: http://www.ncss.edu.au

NCSS Challenge 2014

The NCSS Challenge is a five week competition giving high school students an opportunity to learn and experience computer programming. The Challenge is designed to cater for beginners, intermediate and advanced students.

Contact: NCSS Co-ordinator
T (02) 9351 3424
F (02) 9351 3838
E info@ncss.edu.au

2013 Student attendance: 6,200

Duration: 4 weeks

Age Group: High School students, teachers

Gender: Girls and Boys

Location: Online at the NCSS Challenge website

Event Dates: commences on Monday 4th August 2014

Cost: $20 per student or teacher (including GST)
URL: http://www.ncss.edu.au

Girls' Programming Network 2014

The Girls' Programming Network (GPN) is an extra-curricular program run by girls, for girls. In this one-day workshop participants have the opportunity to develop their own games, learn about digital media, sound, image and video manipulation and even create smart phone applications.

Contact: NCSS Co-ordinator
T (02) 9351 3424
F (02) 9351 3838
E info@ncss.edu.au

Acronym: GPN

2013 Student attendance:

Duration: 1 day

Age Group: Girls in high school interested in Computers and IT, with or without programming experience.

Gender: Girls

Location: School of IT Building, University of Sydney

Event Dates: commences on Monday 4th August 2014

Cost: Free
URL: http://www.ncss.edu.au

National ICT Careers Week

Showcase the variety of careers available in ICT to young people

Contact: Michel Hedley: m.hedley@bigpond.net.au
Kerrie Bisaro: Kerrie.Bisaro@acsfoundation.com.au

Acronym: NICTW

2013 Student attendance:

Duration: 1 week

Age Group: Secondary school and other young people

Gender: Girls, Boys

Location: National

Event Dates: In 2014 from 28 July - 3 August - over 100 events and activities presented by business, education, government, industry bodies, women's groups and professional bodies.

URL: http://www.ictcareersweek.info/

RACQ Technology Challenge Maryborough

Every September over 2,000 students from schools throughout Queensland race human powered vehicles, smilie pushcarts, CO2 Dragsters, solar boats and cars for four state titles across one energy busting weekend!

Contact:
For further information on the RACQ Technology Challenge please contact the
Fraser Coast Opportunities Events team on -

Phone: (07) 4120 5670
Email: events@frasercoastopportunities.com.au

Acronym:
2013 Student attendance: approx. 2000
Duration: 2 days
Age Group:
Gender: Girls, Boys
Location:
Event Dates: 13 and 14 September 2014
URL: http://www.technologychallenge.com.au/

Robocup Junior

RoboCupJunior is a project-oriented educational initiative that sponsors local, regional and international robotic events. It is designed to introduce RoboCup to school children, as well as undergraduates who do not have the resources to get involved in the senior leagues. The focus in the junior league is on education. RoboCup is an international effort whose purpose is to foster Artificial Intelligence (AI) and robotics research by providing a standard problem where a wide range of technologies can be integrated and examined

Contact: Damien Kee
Use the contact form at:
http://www.robocupjunior.org.au/contact

Acronym:
2013 Student attendance:
Duration: 1 day for regional competitions, 2 days for state and the national competition
Age Group: Primary and Secondary
Gender: Girls, Boys
Location: National (except NT)
Event Dates: RoboCup Junior Queensland Championships 2014: 16-17 August

RoboCup Junior Australian Open 2014: 26 - 28 September

The Queensland Championships and Australian open are both being held at the *UQ Centre, University of Queensland, St Lucia.* ***Other states are currently in the process of finalising their dates for 2014. Details will be provided when available.***

URL: http://www.robocupjunior.org.au/

Robogals

Robogals is a student-run organisation that aims to increase female participation in engineering, science and technology. Robogals believes that this is best achieved in a gender balanced environment. We believe that this will give female students the confidence to work in a realistic engineering workplace.

Contact: Email: school@robogals.org
Phone: 03 9035 3880

Acronym:
2013 Student attendance: 2000 children, 70% girls, 30% boys
Duration: all year - workshops at council libraries and primary schools
Age Group: Year 6 - 12
Gender: Aimed at girls, but also open to boys
Location: chapters in QLD, NSW, VIC, SA, WA and ACT
Event Dates: ongoing
URL: https://my.robogals.org/chapters/

More information on each chapter and their activities can be found on the website

Minecraft Competition by THE-CORE

The-Core's purpose is to create opportunity using technologies and creative imagination by identifying social hot trends. Utilising these trends to create innovative ideas to engage the community and inspire creativity. The result gives us the opportunity to harness our youth's imagination through collaboration, embracing smart industries and new technologies. This approach widens the ever-increasing circle of like-minded people and a community of free-flowing thinkers willing to inspire and be inspired.

We began to explore ways in which we could harness the power of creativity through a building competition that would engage the community to envisage a new smart city. It was the "who" that led us to our youth as the competitions participants. They are the future and Minecraft was the "what". Minecraft has become a worldwide phenomenon because it releases free-flowing imagination to all those who engage in it. It's also changing the future of how we learn, as schools adopt it as a teaching tool. Its popularity is the "cool factor", and it easily sparks interest in the community as they work together to build something for a greater good.

Contact: Craig Josic
Co-Founder
THE-CORE
T: 07 5450 2600
E: info@the-core.co
A: USC Innovation Centre Sunshine Coast Qld Australia

Acronym:
2013 Student attendance: Unlimited
Duration: The competition is currently open.
Register at http://www.the-core.com.au/
Age Group: Open
Gender: Girls, Boys
Location: On-line
Event Dates: The best entrants will be selected on May Saturday 31st 2014. These entries will be posted on the Sunshine Coast Daily's Facebook page. The community will then vote for their favourite concepts and then prizes will be awarded, see website for details. We are not looking for the best "Minecrafter", we are searching for clever, different and innovative ideas.
URL: http://www.the-core.com.au/

Women in Technology

Women in Technology (WiT) - is one of Queensland's most respected and active technology industry associations and a peak body for women in the technology industry in Queensland developing a sustainable and growing network of members, sponsors and supporters. WiT aims to support, develop, recognise and promote the achievements of women in the technology industries

Contact: Lisa Cawthorne
     Email: secretariat@wit.org.au
     Mobile: 0430 219 091

Acronym: WiT

Membership/Affiliates: Combined members and affiliates (as at January 2014) is 2208 and growing. Have had a 21% growth in the past 10 months alone.

Duration: founded in 1997

Age Group: Females working in IT, Life Sciences and other technology fields ranging from students through to professionals. We support women at all career levels and those coming in and out of career breaks.

Gender: Women (men are however welcome)

Location: Qld

Event Dates: Ongoing Networking and Professional Development Events, Flexible Mentoring Program, Awards Program, Board Readiness Program and free membership for students.

URL: http://www.wit.org.au/

Young ICT Explorers

YICTE is an all-year competition in which students work on ICT projects of their own choice at home and at school. In August/September, the students come together to showcase their projects to the public and to high-profile judges from Industry and Academia. Students and teachers work together to align potential entries with the school curriculum, enabling them to apply what they've learned in the classroom to the competition project. The goal is to encourage and inspire school students to use their creativity and innovation skills to gain a greater understanding of the diverse possibilities of today's technology. YICTE does not prescribe topics or technologies. Projects are judged according to their Creativity and Innovation, Quality and Completeness, Level of Difficulty, and Documentation. The competition is open to primary and secondary school students from Years 3 -12.

Contact: SAP
     Travis Joy
     Travis.joy@sap.com

Acronym: YICTE

2013 Student attendance: 350

Duration: all year, with a 1 day fair in August/September

Age Group: Year 4-12

Gender: Girls, Boys

Location: Brisbane, Sydney

Event Dates: August

URL: http://www.youngictexplorers.net.au/cms/

OTHER USEFUL RESOURCES

Career information:

www.digitalcareers.edu.au

http://youtube.com/acsfoundation

Profiles of different jobs within the Information and Communications Technology (ICT) industry and interviews and profiles of ICT Professionals.

CS4HS grants for educators

CS4HS is an annual grant program promoting computer science education worldwide by connecting educators to the skills and resources they need to teach computer science & computational thinking concepts in fun and relevant ways
http://www.cs4hs.com/

Free technology courses:

Learn to **code**! http://code.org/learn

Develop your own **games** with GameMaker: http://www.yoyogames.com/gamemaker/studio

Build and program **robots** to do what you want: http://mindstorms.lego.com

Online free **courses**:

http://coursera.com

http://khanacademy.org

https://www.udacity.com

Create stories, games and animations **with Scratch -** http://scratch.mit.edu/

Brisbane opportunities:

The Edge (State Library of Queensland): http://edgeqld.org.au
The Edge runs courses on many technology-related topics for beginners (incl. Java programming, data visualisation, Wordpress websites etc) and most of them are **free**.

Blogs:

What is coding were a game: http://blogs.msdn.com/b/msr_er/archive/2014/05/15/what-if-coding-were-a-game.aspx