



YOUNG ICT - Explorers -

Year 3 - 4

Nikki Peever

Director, Cybersecurity

CAUDIT





YOUNG ICT - Explorers -

New South Wales

Third Place

3 - 4





YOUNG ICT
- Explorers -

The Gamifier 3000 – An AI Powered Learning Experience

Arden Anglican School

Team Members

Genevieve Leung, Zachary Woo

Project Summary

The Gamifier 3000 is an interactive educational game experience that enhances children's independent learning skills using AI technology. This new game will help kids grow their knowledge independently by guiding them through problem-solving strategies. Additionally, it will generate new questions and problems to solve to encourage practice and reinforce learning.

ARDEN



3 - 4

Age Division



YOUNG ICT - Explorers -

New South Wales

Second Place

3 - 4





YOUNG ICT
- Explorers -

Auto Badminton Shuttle Collector

Arden Anglican School

Team Members

Aaron Tung, Boya Li

Project Summary

Our project is about helping badminton players to pick up shuttlecocks without needing to repeatedly bend down. We know that repeatedly bending down and lifting will cause injuries around the back and knees. Our invention will benefit regular players, coaches, kid trainees, the elderly, the injured and the disabled. Our aim is that people with all abilities can enjoy playing badminton.

ARDEN



3 - 4

Age Division



YOUNG ICT - Explorers -

New South Wales

First Place

3 - 4





YOUNG ICT
- Explorers -

The Shade of Protection

Barker College Junior School

Team Members

Claire Wei, Dora Wang

Project Summary

Our project is a robot that can unfold a mini cover which helps keep clothing on the rack and a car dry and safe during rainy and hailing weather. We chose to make this robot since during some parts of the day, we've realized after hanging up the clothes and leaving the car outside, returning home after an event may leave the car and clothes wet and damaged after a gust of strong weather.

Barker
Inspiring Tomorrow

3 - 4

Age Division



YOUNG ICT - Explorers -

South East Queensland
Third Place

3 - 4





YOUNG ICT Explorers

MRI MASTERS

St Joseph's Bardon

Team Members

Angus Frost, Viggo Tunstill, Patrick Mackenzie, Jude Davis

Project Summary

Our team has been making a project for reducing stress for children who have an MRI. Some people in our team have had MRIs and found them a bit scary. We also talked to other kids in our school who have had MRIs and they said they were also scared and the doctors didn't explain very well what was going to happen. When we looked it up we found that "For children, the loud noises and confinement inside the machine can be overwhelming." The Sydney Children's Hospital Network have a mock MRI play activity to make children less scared about MRIs. Our team's goal was to reduce stress for children having MRIs by using technology.



3 - 4

Age Division



YOUNG ICT - Explorers -

South East Queensland

Second Place

3 - 4





YOUNG ICT
- Explorers -

The automatic shoe cleaner

Good News Lutheran School

Team Members

Hamish Gray, Aadhvik Pasupuleti

Project Summary

When people come back from sports or other messy activities, their shoes get dirty, and they often don't have enough time to clean them. We wanted to create a device that would automatically clean people's shoes for them. When you put your feet inside the box, it brushes, spins, and cleans your shoes. It also has three buttons to control the speed: normal spin, medium spin, and fast spin. We followed the Design Thinking process to design this device, and we have created a prototype to show how it could work.



Age Division



YOUNG ICT - Explorers -

South East Queensland

First Place

3 - 4





YOUNG ICT Explorers

Backpack Scanner 2.0

Good News Lutheran School

Team Members

Arthur Thompson, Harry Hoyes

Project Summary

Last year, following the Design Thinking process, we created a basic bag scanner. This year, we are building on that by improving the design with a bag checker. Our idea uses RFID tags attached to each item a student needs in their school bag every day. As students walk out the door, the RFID scanner scans the bag to check if all necessary items are inside. If all required items are detected, the scanner beeps eight times and displays a message confirming that everything is packed. When an RFID tag is scanned, it sends a message to the microcontroller board, which then communicates with an app. We have created a prototype to demonstrate how this improved system works.



Age Division



YOUNG ICT - Explorers -

Victoria
First Place
3 - 4





YOUNG ICT
- Explorers -

BHappy- An app to uplift your spirits

Viewbank Primary School

Team Members

Aaditya Kunnutharayil

Project Summary

BHappy is an app I created with AI to help cheer up my friends.

With BHappy, you won't have to go through your challenges alone. You can choose to read motivational stories or listen to some music to uplift your spirits.



3 - 4

Age Division



YOUNG ICT - Explorers -

Western Australia

Third Place

3 - 4





YOUNG ICT Explorers

Stop AI Scamming

Padbury Catholic Primary School

Team Members

Gabriella Ayala, Chelsea Gray

Project Summary

AI is artificial intelligence this means its not real. Our problem is AI scamming and problems with AI.vWe will design a kahoot game focusing on how informing people about the harm and damage AI can create. We have been inspired by witness the harm that AI has caused over the last few years. This includes, loss of jobs, scamming and energy losses.



3 - 4

Age Division



YOUNG ICT - Explorers -

Western Australia

Second Place

3 - 4





YOUNG ICT Explorers

Negatives and Positives of AI

Padbury Catholic Primary School

Team Members

Cayla Fell-Barrett, Phoebe DeHass

Project Summary

AI is artificial intelligence. AI is taking over the world. We are going to use ICT to make a kahoot telling people about the positives and negatives of AI. We are also going to write a digital story book for kids to help young children understand why and how AI is a big problem. Some negatives of AI include lack of creativity, privacy problems, job loss and security risks. The goal of AI is to provide software to help people. AI can replace jobs like data entry and customer service. Some AI positives include smarter decisions, reducing human errors, improving education and helping health benefits. Our book will talk about these things.



3 - 4

Age Division



YOUNG ICT - Explorers -

Western Australia

First Place

3 - 4





YOUNG ICT
- Explorers -

Lunch Box Robot

Gwynne Park Primary School

Team Members

Quinn, Jazelyn, Taleyah

Project Summary

Our project is a lunch box robot. It picks up lunch box with barcodes and returns it to the right classroom. The problem is that lunch boxes were left in the undercover area and no-one was picking them up.



3 - 4

Age Division



YOUNG ICT - Explorers -

South Australia

Third Place

3 - 4





YOUNG ICT
- Explorers -

WorkNest

Independent Entry

Team Members

Andrew Miao

Project Summary

WorkNest is an all-in-one productivity platform built using HTML, CSS, and JavaScript. The idea behind WorkNest is to give people a single place where they can stay focus, organized, motivated, and productive without the need to switch between lots of different apps. Worknest features all the essential productivity tools, like a timer, daily motivation generator, planner, notes (quickly jot down ideas, stuff to remember) and more. With these tools all in one platform, WorkNest can help people stay on task and focus better.

3 - 4

Age Division



YOUNG ICT - Explorers -

South Australia

Second Place

3 - 4





YOUNG ICT
- Explorers -

K-bot

Echunga Primary School

Team Members

Madi, Lily

Project Summary

It is about a robot that helps people with disabilities. Say if someone with no arms asks for a banana, then it will give a banana to the person. It is important because it helps people.



3 - 4

Age Division



YOUNG ICT - Explorers -

South Australia

First Place

3 - 4





YOUNG ICT
- Explorers -

Millo

Echungga Primary School

Team Members

Hadley, Layla

Project Summary

Our project is a rubbish robot. We looked outside and then said we should make a rubbish robot. Millo helps the land by picking up rubbish. Millo is important because the world needs him. When all the rubbish does not get picked up, he picks it up.



3 - 4

Age Division



YOUNG ICT - Explorers -

North Queensland

Third Place

3 - 4





YOUNG ICT Explorers

The Emotions Game

Rasmussen State School

Team Members

Harmony Harbord, Imogen Hardy, Ruth Galvan

Project Summary

This game is our project that teaches us how you identify your emotions and what to do through a fun game. Some problems we faced was really hard to finish.



3 - 4

Age Division



YOUNG ICT - Explorers -

North Queensland

Second Place

3 - 4





YOUNG ICT Explorers

The Plant Saver

Rasmussen State School

Team Members

Harmony Batterham, Saesha McIlwain

Project Summary

Our project is a device that can check the moisture of a plant's soil to see if it needs water. We choose this project for our Chappy Garden that we have at our school so the plants there won't die from too much water or too not enough water.



3 - 4

Age Division



YOUNG ICT - Explorers -

North Queensland

First Place

3 - 4





YOUNG ICT Explorers

The Go Away Possum Motion Detector

Rasmussen State School

Team Members

Dean Redenius

Project Summary

This device is made to keep possums in a safe area and away from places they should not be. I chose this because most possums at our school get into the building roofs or the covered play areas instead of living in trees. I did have problems with some of the coding with this project, but managed to solve most of them through keep trying and using 2 Microbits.



3 - 4

Age Division



YOUNG ICT - Explorers -

Tasmania First Place

3 - 4





YOUNG ICT
- Explorers -

The Super Solar's

Waimea Heights Primary School

Team Members

Jouseff Mohamad, Reece Situ

Project Summary

Our problem is affordable and clean energy because almost 1 in 10 people globally still don't have access to electricity and there are still heaps of people who are having trouble paying the energy bills and also heaps of people who don't have CLEAN energy because electricity is SUPER expensive and not very clean either and it's happening everywhere as we speak! So, we are here to fix that with our super solar machine! We use a light sensor so when the light level gets too low the servo will turn it to maximum sunlight for best energy income.



Age Division



YOUNG ICT - Explorers -

Year 5 - 6

Kaye North

*Community and Engagement Manager
Code Club Australia*





YOUNG ICT - Explorers -

New South Wales

Third Place

5 - 6





YOUNG ICT Explorers

The Rubbish Sorter

St. Andrew's Cathedral School

Team Members

Hugo Balasingham, Jonathan Wood

Project Summary

Our project targeted the problem of people placing recyclable items into a waste bin. Did you know that approximately 20% of plastic in landfill is actually recyclable? We solved this problem by creating a breadboard computer to help determine which bin rubbish should go into. The computer uses a microchip as its brain, which is attached to the laptop where all the code is. It works by using the barcode on pieces of rubbish to find its bin. The barcode information is stored in a code-based dictionary (a sorter) using tuples (e.g. plastic, red bin). Once the disposal location of the rubbish is found, a LED light on the circuit lights up depending on which bin the rubbish should be placed (e.g. blue light for blue bin).



**ST ANDREW'S
CATHEDRAL SCHOOL**

5 - 6

Age Division



YOUNG ICT - Explorers -

New South Wales

= Third Place

5 - 6





YOUNG ICT
- Explorers -

Clean Water For All Using Coding and Eco-Friendly Research

St. Andrew's Cathedral School

Team Members

Thomas Yarwood, Erik Atkins

Project Summary

- Our project is an innovative website called ecofriendlyresearchhub2.0.
- It provides information about certain items that can be homemade and good for environment: for example, a water filter or a clay pot fridge which are
 - (i) cheap to make;
 - (ii) good for the environment; and
 - (iii) have a high impact on people's daily lives.
- This website helps to provide a sustainable environmental future for all of us.
- We chose this project after watching documentaries about the lack of clean drinking water in other parts of the world.



ST ANDREW'S
CATHEDRAL SCHOOL



Age Division



YOUNG ICT - Explorers -

New South Wales

Second Place

5 - 6





YOUNG ICT Explorers

Project FALCON

St. Andrew's Cathedral School

Team Members

Antares Qi, Eleanor Ha

Project Summary

Our drone is designed to serve as an efficient water monitoring device and detects pollution in river flow which mechanises as an alarm for others. Project FALCON is equipped with advanced cameras that enable it to detect the movement of rubbish floating in the water. This allows it to accurately identify and target the debris by what we had coded. Additionally, the drone can sense water flow patterns, which is vital for understanding how the pollutants are spreading in the water body. It can also locate polluted water areas, by its cameras and records it on its GPS history. Once it has gathered all this information, it will alert other nearby ships to come and take care of the waste, since the items would be too heavy for our drone to sustain.



Age Division



YOUNG ICT - Explorers -

New South Wales

First Place

5 - 6





YOUNG ICT - Explorers -

Cybersafety Awareness for tweenies!

Loreto Kirribilli

Team Members

Isla De Guzman, Erica Natawardaja

Project Summary

The goal is to educate, empower and inform other students to be safe and savvy online.

Making use of a variety of Interactive tools and multimedia products to communicate important messages about staying safe online.

Products include: ThingLink - interactive images, Delightex - coding an interactive activity, Adobe Express - animations, QR codes for easy access of products, and other collaborative tools for planning.



5 - 6

Age Division

We started this topic in class and then started to create our own interactive activities we thought could be information for tweenies.



YOUNG ICT - Explorers -

South East Queensland

Third Place

5 - 6





YOUNG ICT Explorers

Hug 2 Heart

St Joseph's Bardon

Team Members

Francesca Fenwick, Saranya Britton, Hazel Gannon, Vivienne Knight

Project Summary

Our project was inspired by the loneliness and anxiety children with leukemia can experience during long hospital stays. We learned that this can have a big impact on their wellbeing, so we focused on creating a solution to provide emotional support. From our initial ideas, we decided to develop a comfort-based teddy bear that can connect with loved ones who can't be with them at the hospital or treatment centres. Our solution involves a teddy bear fitted with a LEGO Spike Prime robot to provide hugs on command. It's connected to a micro:bit to allow the child to connect with loved ones at home so they can feel less anxious and lonely. We faced challenges with the engineering of the robotic arms and are currently working on how to get the micro:bit to activate the Spike Prime.



5 - 6

Age Division



YOUNG ICT - Explorers -

South East Queensland

Second Place

5 - 6





YOUNG ICT Explorers

The Family Press

St Joseph's Bardon

Team Members

Eliza Watson, Rheem Tae, Lucilla Kneale, Edith Ernst

Project Summary

Our project was inspired by the loneliness and disconnection experienced by an elderly family member who moved into aged care. We learned that loneliness is a significant problem for older Australians, especially in care facilities. Our solution is an app and VR experience designed to help elderly people feel more connected to their loved ones.

This private, family-only app allows family members to share photos and videos. It generates a weekly family news article from short voice recordings from each family member and can show photos added by family members. The app also includes a simplified voice connector for making calls and features VR capabilities to view current 360-degree family videos, nostalgic memories and calming environments. We are currently modeling the app in Keynote and Delightex and exploring software for its creation. We hope this solution will help reduce loneliness and reconnect elderly people with their families.



Age Division



YOUNG ICT - Explorers -

South East Queensland

First Place

5 - 6





YOUNG ICT
- Explorers -

APF (Automatic Pet Feeder)

Good News Lutheran School

Team Members

Jason Shih, Vivaan Patel, Lincoln Wong

Project Summary

Following the Design Thinking process, we developed an Automatic Pet Feeder to solve the problem of feeding chickens when owners are away. The device automatically dispenses food and water at set intervals and includes a camera to allow owners to watch their chickens live from their phones. We created a prototype to demonstrate how the system works.



Age Division



YOUNG ICT - Explorers -

North Queensland

Second Place

5 - 6





YOUNG ICT
- Explorers -

The Moisture Sensor

Rasmussen State School

Team Members

Patrick Johnson, Jayden McIlwain, Angus Shaw

Project Summary

This device is made to help people to grow plants and tell the people when the plant needs water or if it has had too much water.



5 - 6

Age Division



YOUNG ICT - Explorers -

North Queensland

First Place

5 - 6





YOUNG ICT Explorers

Possum Detector

Rasmussen State School

Team Members

Timothy Cooper

Project Summary

My project is a Microbit that keeps animals to their right area. I decided to create this project because so then the possums don't eat/sleep at the covered play area (cpa) at my school. You can usually see them at the cpa toilets and roofs.



5 - 6

Age Division



YOUNG ICT - Explorers -

South Australia

Third Place

5 - 6





YOUNG ICT Explorers

DeeeeeeTector

Kilkenny Primary School

Team Members

Oren Clarke, Owen Arrison, Henry Burns, Jason Nash

Project Summary

The DeeTector will use sonar technology in a moving robot to move around sites that people can't go. We will program a Microbit to help make the robot move and decide if there are people there to be rescued.



Age Division



YOUNG ICT - Explorers -

South Australia

Second Place

5 - 6





YOUNG ICT
- Explorers -

Helperbot

Kilkenny Primary School

Team Members

Violet Coyle, Teddy Finlay, Ada Pike-Chan, Maggie Margan

Project Summary

The Helperbot - to help explain your feelings and emotions.
We wanted to help others to be able to understand one another's feelings.

Using a coded Microbit and 3D printed housing - we are making the Helperbot portable and easy for everyone to use!



Age Division



YOUNG ICT - Explorers -

South Australia

First Place

5 - 6





YOUNG ICT
- Explorers -

Automatic Rubbish Sorting System

St Thomas Catholic School, Goodwood

Team Members

Chelsea Tran

Project Summary

The Automatic Rubbish Sorting System is used to solve common problems in households such as sorting and recycling rubbish.

Research actually shows that one or two people out of ten recycle everyday with only a rare amount of countries with five to six out of ten. That only results to about 9% of the world's rubbish being recycled properly so I decided that I was going to use this as my project. The Automatic Rubbish Sorting System is used to make sorting easier for everyday life.



Age Division



YOUNG ICT - Explorers -

Victoria

Third Place

5 - 6





YOUNG ICT
- Explorers -

Mosquito Monitor – Smart Detection for a Safer Community

Strobotix Academy

Team Members

Aradhya Devgan, Ishman Devgan

Project Summary

Some mosquitoes, like *Aedes aegypti* and *Aedes albopictus*, can spread dangerous diseases like dengue, Zika, and chikungunya. These mosquitoes are becoming more common in places like the Torres Strait and there is an increasing risk of these outbreaks and transmission to mainland Australia due to warmer weather and pesticide resistance. Right now, it's hard to know when these mosquitoes are nearby. Most ways to find them are slow, expensive, or need experts. That means schools and communities can't easily help stop the spread. We aim to create a smart and affordable system to help detect these dangerous mosquitoes in our suburb before they cause health problems. We plan to set up a network of small sensor nodes across the area.

5 - 6

Age Division



YOUNG ICT - Explorers -

Victoria

Second Place

5 - 6





YOUNG ICT - Explorers -

Sickbay I

St Mary's Primary School

Team Members

Sophie Augustine, Abbey Charles, Phoenix Shouman, Maeve Jenkins

Project Summary

Our project is called Sickbay I. It is an app that has been created to help teachers provide care to students who are unwell or injured or at school. The app supports teachers by guiding them step-by-step through how to respond to a students' symptoms. Using artificial intelligence, the app responds to the photos and information uploaded and suggests the best treatment option. This provides better care for students and supports teachers in helping them make better decisions.



5 - 6

Age Division



YOUNG ICT - Explorers -

Victoria

First Place

5 - 6





YOUNG ICT Explorers

Umbrella Helmet

St Mary's Primary School

Team Members

Paige Ralston, Alyssa Milidoni, Emilia Kantzavelos, Harrison Roscoe

Project Summary

Our project is called the Umbrella Helmet. It's made to help people stay dry while riding their bikes. This is helpful for anyone who still has to get around when it's raining but doesn't want to get soaked! We thought about safety was way to heavy. So, we went back, made some changes, and created a lighter and better design. Our second prototype uses a rain sensor to detect rain, then it talks to the second micro:bit which has been coded to rotate two servo motors and this then automatically pushes down a waterproof shield, protecting the rider from the rain.



5 - 6

Age Division



YOUNG ICT - Explorers -

Western Australia
Highly Commended

5 - 6





YOUNG ICT Explorers

Lumi – The AI-Powered Digital Pet Companion for Kids

Riverton Primary School

Team Members

Devi Kamath, Meera Kamath

Project Summary

Lumi is a next-generation digital pet designed by two young sisters, Devi (11) and Meera (8), to make screen time safer, smarter, and more supportive for kids. Appearing as a fluffy cat or a friendly golden puppy, Lumi comes to life the moment a child logs in—and stays present until they log out. Lumi walks across the screen, reads when it's study time, chases fish at meal time, and nudges kids to take breaks or go for a walk. It plays fetch, can be dressed up, and shares joy and companionship. But beneath the cuteness lies a super-intelligent AI engine that makes Lumi a true digital guardian and emotional ally.



**RIVERTON
PRIMARY CAMPUS**
INDEPENDENT PUBLIC SCHOOL

5 - 6

Age Division



YOUNG ICT - Explorers -

Western Australia

Third Place

5 - 6





YOUNG ICT
- Explorers -

Carer's Companion

Perth College

Team Members

Leila Scarf, Amelie Gianoli

Project Summary

Our project is going to solve the problem of carers not understanding or taking in all information at a doctor's appointment, because they're overwhelmed or are older and need more time to process the information. Carers Companion will have a medication log, a calendar (for keeping track of appointments or medication renewals), a transcription area (that also records what the doctor has said/ is saying) and a support area with links, tips, and goals specifically for carers needs.



Perth College
ANGLICAN SCHOOL FOR GIRLS

5 - 6

Age Division



YOUNG ICT - Explorers -

Western Australia

Second Place

5 - 6





YOUNG ICT
- Explorers -

Household AI Bin

Perth College

Team Members

Kaylene Chee, Linda Yao

Project Summary

AI self-sorting bin that saves time and ensures that you to throw rubbish in the correct bin. It prevents landfills from the start. We guarantee that the rubbish is sorted correctly and put into the correct bins. Many families find it confusing to sort their rubbish at home, which means recyclables often end up in landfill. This creates more waste and harms the environment. Although AI sorting bins already exist, there are no household AI bins, unlike our invention.



Perth College
ANGLICAN SCHOOL FOR GIRLS

5 - 6

Age Division



YOUNG ICT - Explorers -

Western Australia

First Place

5 - 6





YOUNG ICT - Explorers -

Marine Guard

Perth College

Team Members

Anna Goode, Audrey Weisz

Project Summary

Currently, people think sharks are fearsome monsters, and they are using shark nets and killing sharks to protect people at beaches. Humans kill an estimated 100 million sharks every year. That's an average of almost 274, sharks every day, over 11,000 sharks every hour, or around three sharks every second. We wanted to develop a solution which would protect people from sharks, without harming sharks or other marine life. Marine Guard is our solution. Marine Guard will use an autonomous solar powered sailboat as an aircraft carrier for drones which will report shark movements. Marine Guard can use this information to track sharks, and use a machine learning model to predict future shark activity. Using this information, Marine Guard will provide a “shark forecast” and local shark alerts to warn people at beaches of sharks.



Perth College
ANGLICAN SCHOOL FOR GIRLS

5 - 6

Age Division



YOUNG ICT - Explorers -

Tasmania
Third Place
5 - 6





YOUNG ICT
- Explorers -

Bright-Side Device

Waimea Heights Primary School

Team Members

Romisa Asghari, Mia Yang, Bella Coy

Project Summary

We have identified a global problem, bullying. People around the globe have experienced or have witnessed bullying. It damages people's wellbeing and causes them to lose self confidence. As a group, we have decided to step up and make a difference!

Our project is mainly targeted for a trusted adult and a child who is currently experiencing bullying or is witnessing it. The trusted adult will take the receiver, and the child will take the sender.



5 - 6

Age Division



YOUNG ICT - Explorers -

Tasmania
Second Place
5 - 6





YOUNG ICT - Explorers -

Automatic Pet Carer

JRLF - East Derwent Primary School

Team Members

Willow Coleman, Sophie Devine

Project Summary

Most adults have to work full time shifts and have kids and sometimes even stay late at work. Most pets can't go with them on a holiday or camping. This means the pets get lonely and can have anxiety or damage your house. It is not fair on the pets.

Our solution to this problem is to create a robotic pet that comes in a variety of different animals to care for your pet's needs like feeding, walking and every other task to care for your pet.

Because the Automatic Pet Carer also looks like an animal your pet will not be scared by it and will feel like it has a friend. You will be able to give the Automatic Pet Carer voice instructions on how to care for your pet. We will research and design the Automatic Pet Carer to look like the type of animal you have so that your pet feels safe and cared for.



Jordan River
LEARNING FEDERATION

5 - 6

Age Division



YOUNG ICT - Explorers -

Tasmania
First Place
5 - 6





YOUNG ICT Explorers

Anxiety Glow

Waimea Heights Primary School

Team Members

Mary Dalla-Fontana, Olivia Ding, Ingrid Shelley

Project Summary

The problem that we are focusing on is anxiety. We have decided to create a gadget that can detect anxiety like fidgeting and repetitive shaking which will send a signal to the micro:bit which will cause the LED lights on a stand/holder to go off. These relaxing lights will help calm you down. Anxiety is a real-world problem. Several of us don't know how serious this can be and how hard it is to face. Many people suffer from it including some of us, people we know in our community and the 301 million other people around the world. This inspired us to help and support these people in need. We want more people to be aware of this overwhelming mental disorder.



5 - 6

Age Division



YOUNG ICT - Explorers -

Year 7 – 8

Nik Lavrentiev

*Head of ANZ Solution Advisory – SAP Ariba, SAP Fieldglass
and SAP Business Network*





YOUNG ICT - Explorers -

New South Wales

Third Place

7 - 8





YOUNG ICT Explorers

Growth Academy

St George Christian School

Team Members

Grace Figueroa

Project Summary

The aim of my project is ultimately to bring the future generation towards a more sustainable future! I see people every day disregarding the world we live in and forgetting the importance of sustainability. So, I decided to create Growth Academy, a software app that engages primary through secondary students through activities and the goal of Augmented Reality. The entire purpose is to encourage students to see the importance of looking after our world! I really hope this helps bring our world to a more sustainable and eco-friendly future. I also created a reminders page, where students can fill out related tasks and then mark them off as completed.



7 - 8

Age Division



YOUNG ICT - Explorers -

New South Wales

Second Place

7 - 8





YOUNG ICT - Explorers -

EduAssist

St. Philip's Christian College - Waratah

Team Members

Nathaniel Chandler

Project Summary

EduAssist is designed for high school students to improve their motivation and quality of learning in class. It is an AI RAG tool, as well as a task setting tool that instinctively identifies the academic issues they are having. It can read students' textbooks, and when they ask questions, it accesses information directly from the curriculum to assist students in their studies. What sets it apart from other AI tools (like ChatGPT) is that it coaches a student to find the answer for themselves, rather than providing the answer. Therefore, it is training students to think, rather than doing the thinking for them. EduAssist is able to give students examples, set questions from their textbooks to allow retrieval practice and application, acting like their personal tutor.



7 - 8

Age Division



YOUNG ICT - Explorers -

New South Wales

First Place

7 - 8





YOUNG ICT Explorers

Ashborne

Knox Grammar School

Team Members

Eric Hu

Project Summary

Ashborne is a narrative-driven text RPG that explores *power, identity, and violence* through meaningful player choice and free-form input that I made myself. Inspired by *Shakespearean themes* and modern ethical dilemmas, it blends deep storytelling with *custom-built systems* in C# and Blazor. Players wear mystical Masks and make choices that affect their world, using typed commands and choices during dialogue. It is designed to be targeted specifically at young people and students (hence the video game medium, a medium that, when used correctly, can be both engaging and emotional). Through this, Ashborne invites players to question who writes the script, and subsequently, who dares rewrite it. The game can be played at: <https://halfcomplete.github.io/Ashborne/>



**KNOX
GRAMMAR
SCHOOL**

7 - 8

Age Division



YOUNG ICT - Explorers -

South East Queensland

Third Place

7 - 8





YOUNG ICT Explorers

GuardGro

Downlands College

Team Members

Ava Mellor

Project Summary

GuardGro is designed to help prevent pests from getting into your garden. The design is a net with sensors that lets out a gas called Methyl bromide. This gas kills pests and then sensors can be turned on and off with a remote so you can reach the garden at any moment.



7 - 8

Age Division



YOUNG ICT - Explorers -

South East Queensland

Second Place

7 - 8





YOUNG ICT
- Explorers -

Digital Dinosaurs

Brisbane South State Secondary College

Team Members

Niamh Buckley, Violet Belton, Amelia Brisbane

Project Summary

We are the Digital Dinosaurs, a group of five students from Brisbane South SSC and our project aims to improve mental and physical health in teenagers by exploring the issues of screen time in schools. We chose this project because technology use by youth is a national issue that needs to be brought to the Queensland Government's attention because of its effect on new generations. Although they are occupied with more pressing concerns around subjects like cost-of-living, they could be investing more in research to keep up with the ever-evolving technology. Currently, many students are enrolled in Online-Learning System schools, which could contribute to a decline in overall health. Our goal is to explore how screen time in schools could be substituted with paper, whiteboards, outdoor learning and physical activity, and whether this leads to students feeling better about their physical activity levels, feeling less exhausted and having a more positive attitude towards learning.



**Brisbane South
State Secondary
College**

7 - 8

Age Division



YOUNG ICT - Explorers -

South East Queensland

First Place

7 - 8





YOUNG ICT
- Explorers -

Hidden Habitats

Brisbane South State Secondary College

Team Members

Sadie Angus

Project Summary

My project, Hidden Habitats, is a project about human urbanisation and the effect that it has on wildlife and wildlife's natural habitats. I'm doing this because there are around 100 million wild animals that die, get injured, or are displaced due to urbanisation. The aim of my project is to gather data on remnant wildlife in urban areas and to use this data to raise awareness as to the threats of over-development in those areas. To inform this project I will create a wildlife sensor that monitors sound and other activity and place these in urban and bushland areas. The sensors, connected to the cloud, would be designed to detect wildlife and display this data in a manner that is understandable by the broader community. As an extension I am also exploring how detected wildlife could be personalised to create a stronger emotional connection, for example by giving these animals names and backstories.



**Brisbane South
State Secondary
College**

7 - 8

Age Division



YOUNG ICT - Explorers -

South Australia

First Place

7 - 8





YOUNG ICT - Explorers -

TrackWear - Stay Connected

Pulteney Grammar School

Team Members

Bella Zhang

Project Summary

TrackWear is a safety-focused project that uses ICT to create wearable tracking accessories linked to a mobile app. It is designed for users like children, elderly people, and pets to help prevent them from getting lost and to send alerts in emergencies. The accessories include necklaces, keychains, and pet collars, each with a small tracking chip that connects to the app using Bluetooth or GPS. The app shows real-time locations, alerts users when someone leaves a safe area, and uses AI to learn routines and reduce false alarms. It is simple to use and works across different devices. The design focuses on being stylish and comfortable so people will want to wear it every day. Overall, TrackWear combines technology, design, and safety to help people stay connected and protected.



7 - 8

Age Division



YOUNG ICT - Explorers -

Victoria

Second Place

7 - 8





YOUNG ICT Explorers

RC Rover

Saint Francis Catholic College

Team Members

Chord Wilson, Nathan Ilardo

Project Summary

The RC Rover is a remote-controlled device designed to explore and document radioactive areas affected by nuclear disasters, such as Chernobyl. It can navigate harsh landscapes and compact spaces that humans or large machines cannot access. The rover is hardwired with a radio controller and a live camera feed.

Designed using Blender and Tinker Cad software, the rover features wheels made of angled flaps that can flex and compress, providing suspension when needed. These flaps are engineered to travel consistent distances and withstand more difficult terrain and harsher conditions than conventional tires. The proposed tyre solution eliminates the need for maintenance, as the wheels are airless and can survive tearing.



St Francis
CATHOLIC COLLEGE

7 - 8

Age Division



YOUNG ICT - Explorers -

Victoria
First Place
7 - 8





YOUNG ICT
- Explorers -

Extinct to Exist – DOSBox Dinosaurs Roar Again

Whittlesea Tech School

Team Members

Dennis Joseph, Jiya Sekhri, Nimrit Chahal

Project Summary

In many Australian school many students are required to purchase iPad or computers as part of their school curriculum. This a significant financial burden for families. Computers also have to be changed every three to two years contributing to an e-waste issue. We think this is very wasteful and unsustainable.

Our team decided to travel back in time—to the digital dinosaur age. We decided to see if we could get old computers and install Linux and also old educational software from the DOS era (dinosaur software). We installed Lubuntu on old laptops to make them ran as fast as a modern laptop. We then created an offline repository for productivity software such as Scratch, DOSBox, Evince and python.



WHITTLESEA
TECH
SCHOOL

7 - 8

Age Division



YOUNG ICT - Explorers -

Western Australia

Second Place

7 - 8





YOUNG ICT
- Explorers -

climateclock-wa

St Marys Anglican Girls school

Team Members

Eve O'Kane

Project Summary

ClimateClock WA is an innovative web application designed to empower Western Australians to actively reduce their carbon footprint and achieve net-zero emissions by 2050. By integrating real-time, region-specific data on energy consumption, transport emissions, and lifestyle habits, the app provides personalized daily emissions tracking and actionable tips tailored to Western Australia's unique climate and energy profile. This project combines climate science, energy analytics, and behavioural science to promote sustainable living through technology. The app motivates users by visualizing their progress toward net-zero, encouraging meaningful changes in daily choices. Developed using modern web technologies, ClimateClock WA is accessible across devices and designed with user-friendly interfaces to maximize engagement and impact.



St Mary's
ANGLICAN GIRLS' SCHOOL



Age Division



YOUNG ICT - Explorers -

Western Australia

First Place

7 - 8





YOUNG ICT
- Explorers -

Eco-AI Energy Tracker for Schools

St Marys Anglican Girls school

Team Members

Eve O'Kane

Project Summary

The Eco-AI Energy Tracker for Schools is a machine learning web application that empowers schools to track, analyse and reduce their energy consumption. It uses weather-based data inputs including temperature, humidity, and wind speed to predict weekly electricity usage with a trained AI model.

Students, teachers or administrators can also edit the energy data directly in the app. This retrains the model live in real-time, allowing for custom analysis based on each school's specific environment. Data is visualised in easy-to-read graphs for better energy planning and sustainability education.



St Mary's
ANGLICAN GIRLS' SCHOOL



Age Division



YOUNG ICT - Explorers -

Year 9 – 10

Selvam MK Venugopal
Senior Customer Success Partner
SAP Australia & New Zealand





YOUNG ICT - Explorers -

New South Wales

Third Place

9 - 10





YOUNG ICT Explorers

Electroflora

Mount St Benedict College

Team Members

Sophia Howe, Eva Mckenzie

Project Summary

Our invention Electroflora aims to find an environmentally friendly way to create electricity, avoiding the release of hazardous greenhouse gases into the atmosphere. We were originally interested in experimenting with the notions expressed in the Law of Conservation of Energy, "Energy cannot be created or destroyed only transformed or transferred". Based off this logic the energy in organic matter, should hence be able to be used as an energy source. Plants are constantly releasing organic matter into their soil, the bacteria which then decomposes it releases electrons, which can be used to generate electricity. In our invention with the use of a special battery (consisting of anodes and cathodes) we can collect these electrons to generate electricity which can be used as an alternate renewal power source to power houses or even on a larger scale, cities. Realistically our invention would be used in conjunction with other renewable energy sources like solar to supply power to larger areas. As our invention involves taking energy from an already implemented natural pattern of regeneration, the environmental impact is limited. This is a clean source of energy which does not release greenhouse gas emissions, helping to solve the rising problem of climate change.



9 - 10

Age Division



YOUNG ICT - Explorers -

New South Wales

Second Place

9 - 10





YOUNG ICT
- Explorers -

MigrAI 2.0

Knox Grammar School

Team Members

Alvin Alford

Project Summary

MigrAI is a smart tool that helps GPs diagnose patients with migraines more easily.

It looks at symptoms and medical history to suggest possible causes and support better decisions.

This helps doctors give faster, more accurate care to migraine patients.



KNOX
GRAMMAR
SCHOOL

9 - 10

Age Division



YOUNG ICT - Explorers -

New South Wales

First Place

9 - 10





YOUNG ICT
- Explorers -

Bunjil Lantana Trust: stage 0

Independent Entry

Team Members

Ruhan Sanjay

Project Summary

The main project is centered on a circular economy, where Lantana camara stems are repurposed to construct basic furniture. Stage 0 focuses on building software to accurately detect Lantana camara plants in regions where manual access is difficult. Using a YOLOv8 deep learning model, trained on a custom dataset of 9,000 images—collected, annotated, and augmented—we achieved a mean average precision (mAP) of 89. This enables precise identification of various lantana types across Australia. To enhance field usability, we integrated What3Words geolocation, allowing each plant's position to be tagged with a unique 3-word address. A terrain classification model was also developed to distinguish between cuttable and non-cuttable areas (e.g., meadows vs. rivers), achieving 99% accuracy. This allows us to understand whether manual removal is possible.

9 - 10

Age Division



YOUNG ICT - Explorers -

South East Queensland

Second Place

9 - 10





YOUNG ICT Explorers

TheraBuddy

Gladstone State High School

Team Members

Addison West, Declan Windsor, Chloe Wellsted, Ishlyn Kaur

Project Summary

Our solution is an app and website that solves the problem of mental health issues like anxiety and depression in teenagers. We have created an AI online therapist, called Therabuddy. Some features that Therabuddy offers are: free venting with guaranteed privacy, the option of either speaking or typing with personalised responses from the AI. Every morning, Therabuddy will greet you and ask comforting questions such as: How well you slept and how you a feeling today. There will also be a night reflection where Therabuddy will ask you more comforting questions surrounding the overview of your day. You have an option to play some calming music to help you sleep and clear your mind. You can also customise an avatar and nickname for your Therabuddy to make the experience feel more at home and personalised just for you! Therabuddy isn't designed to solve all your problems, it acts as a supporting companion to help you get through tough times.



Age Division



YOUNG ICT - Explorers -

South East Queensland

First Place

9 - 10





YOUNG ICT Explorers

CoList

Keppock State High School

Team Members

Micah Ephraims

Project Summary

Current teamwork tools have major issues. Teams have to use many different apps. Important information gets lost when moving between platforms. Some tools are too hard for important people like executives to use. CoList fixes these problems with a smart design. It shows the same content in two different ways a full-featured visual mode for power users and a simple list view for executives and clients. The app uses strong encryption to keep data safe.



9 - 10

Age Division



YOUNG ICT - Explorers -

Western Australia

Third Place

9 - 10





YOUNG ICT - Explorers -

Hyper Help

Ashdale Secondary College

Team Members

Olivia Coote, Ryley Sternberg, Alia Kirk-Burnnand

Project Summary

Our app tends to kids in high school that are struggling with mental health. Our app has an AI programmed friend that can help the child talk through their problems just how a normal person would so they don't feel like they are not understood. We make it fun and interactive with the ability to customise your AI friend to fit your likings. Our app is better than other apps because it is confidential which means no one finds out this information unless it is very serious which our programme is trained for. If someone looked at your phone and saw our app, they wouldn't immediately think that you are depressed or struggling, they would just think it's a normal app. Our app can also be for children who are struggling to make friends so they can have someone to talk to that won't judge them and will always be happy for them.



9 - 10

Age Division



YOUNG ICT - Explorers -

Western Australia

Second Place

9 - 10





YOUNG ICT
- Explorers -

StudieSpace

Ashdale Secondary College

Team Members

Tara Grant, Leija Smith, Ciara Murray

Project Summary

- Is an app which gives study resources and recommendations.
- Is tailored to your chosen subjects and school's curriculum.
- Allows you to catch up on missed work easily, or work ahead.
- Useful for those who get confused in class or miss a lot due to holidays or sickness.
- Means students will feel better prepared and in control of their learning.
- Will be powered by AI - specifically GPT.
- Allows for custom-made advice.
- Can be trusted as it is used worldwide.



9 - 10

Age Division



YOUNG ICT - Explorers -

Western Australia

First Place

9 - 10





YOUNG ICT
- Explorers -

Ecotrail

Ashdale Secondary College

Team Members

Sarang Khetani, Yug Desai, Samik Patel, Jevin Patel

Project Summary

- Eco Trail combines engaging, locally led nature adventures with sustainable travel options, allowing you to see the world with a purpose and give back to the individuals and communities that make it unforgettable.
- EcoTrail harnesses AI to craft sustainable journeys effortlessly.
- Our intelligent travel planning website minimises environmental impact while maximising adventure, so you can explore responsibly, stress-free.



9 - 10

Age Division



YOUNG ICT - Explorers -

Australian Capital Territory

Third Place

9 - 10





YOUNG ICT
Explorers

Automated Plant Watering System

Burgmann Anglican School

Team Members

Samuel Gao, Alex Stichbury, Gahan Jaidi

Project Summary

The project will be about a plant pot that has soil in it and a plant is optional, and when the soil is dry it will give a warning with LED lights and then it activates a motor that will drip water into the soil. And finally when the watering is done the warning LED light will turn off/red.



BURGMANN
ANGLICAN SCHOOL
GRACE COMMITMENT WISDOM

9 - 10

Age Division



YOUNG ICT - Explorers -

Australian Capital Territory

Second Place

9 - 10





YOUNG ICT - Explorers -

Plant Health Scanner

Burgmann Anglican School

Team Members

Devika Kugan

Project Summary

The application uses machine learning to diagnose plant health issues by analyzing photos of plant leaves. Users take or upload a picture of a leaf, and the app identifies potential problems—such as nutrient deficiencies, lack of water, pest damage, or disease—based on visual features like color, texture, and spotting. The machine learning model is trained on a dataset of labeled leaf images, allowing it to recognize patterns associated with specific plant conditions. Image recognition techniques help the system detect and interpret these visual cues accurately. The aim of the project is to provide a simple, accessible tool that supports everyday plant care, especially for beginner plant owners who may not recognize the early signs of plant stress. When a problem is detected, the app can provide a brief explanation of the issue along with basic care recommendations, such as watering tips or suggestions for fertilizer.



BURGMANN
ANGLICAN SCHOOL
GRACE COMMITMENT WISDOM

9 - 10

Age Division



YOUNG ICT - Explorers -

Australian Capital Territory

First Place

9 - 10





YOUNG ICT
- Explorers -

Emotion-Activated Sprinkler: Smile to Get Soaked

Burgmann Anglican School

Team Members

Dev Arora, Yixaio Hu, Riley Trommestad, Luke Johnston

Project Summary

The project design is based on a common garden sprinkler system, along with AI detection. It will work using a mechanism to spray water, a camera, a device to rotate the sprinkler along two axes and AI which we will program to detect human emotions. The AI will be connected to a camera to detect a certain emotion, for example happiness through factors like smiling, which will then send signals to the device to rotate the sprinkler in the direction of the person and then spray water onto the person.



BURGMANN
ANGLICAN SCHOOL
GRACE COMMITMENT WISDOM

9 - 10

Age Division



YOUNG ICT - Explorers -

North Queensland

Second Place

9 - 10





YOUNG ICT Explorers

Kinetic Battery Power Recharging Container

North Rockhampton State School

Team Members

Taifa Sultana, Xander Jennings, Jett Thomas

Project Summary

This project is about preventing railroad crossing accidents in rural Rockhampton. This is a problem because most rural railroad crossings don't have traffic lights. A device with sensors and powered by solar panel will be placed beside the track to inform cars when a train is coming. This can be shown by flashing lights and sounds blaring.



9 - 10

Age Division



YOUNG ICT - Explorers -

North Queensland

First Place

9 - 10





YOUNG ICT Explorers

Rail crossing safety in rural Rockhampton

North Rockhampton State School

Team Members

Taifa Sultana, Xander Jennings, Jett Thomas

Project Summary

This project is about preventing railroad crossing accidents in rural Rockhampton. This is a problem because most rural railroad crossings don't have traffic lights. A device with sensors and powered by solar panel will be placed beside the track to inform cars when a train is coming. This can be shown by flashing lights and sounds blaring.



9 - 10

Age Division



YOUNG ICT - Explorers -

South Australia

Third Place

9 - 10





YOUNG ICT Explorers

Making QQ Plots

Prince Alfred College

Team Members

Charles Tang

Project Summary

Normal distributions are everywhere. Heights, test scores, running times etc. But how can one be sure that any set of data is normally distributed? Visually, this can be achieved through a QQ plot (or quantile–quantile plot). To achieve this, R, a coding language made for statistical computing and graphics, was used due to the various functions for statistical analysis. QQ plots can show visually which can be useful for understanding whereas formal tests just provide numbers which confirm or reject the null hypothesis that the data is normally distributed. Then by prompting an AI model, the implications of this QQ Plot can be analysed.



PRINCE
ALFRED
COLLEGE

9 - 10

Age Division



YOUNG ICT - Explorers -

South Australia

Second Place

9 - 10





YOUNG ICT
- Explorers -

Nibbl. App - Track your Foods, Waste None

Independent Entry

Team Members

Hayden Kong

Project Summary

Nibbl. App is an all-in-one solution designed to help households reduce food waste, save money, and support their local communities. With features like smart food tracking, AI-powered receipt scanning, and personalised recipe suggestions based on what you have at home, Nibbl. makes it easy to keep track of what you have at home and use it before it expires. The app also includes a food-sharing feature called MyLocal, allowing users to donate extra items to local food banks or neighbours. With its clean, user-friendly interface, Nibbl. puts powerful tools in users' hands to help them make sustainable choices every day.

9 - 10

Age Division



YOUNG ICT - Explorers -

South Australia

First Place

9 - 10





YOUNG ICT
- Explorers -

helloai - AI designed for everyone.

Independent Entry

Team Members

Hayden Kong

Project Summary

HelloAI is an affordable, user-friendly AI platform that brings the latest models from OpenAI and Google to a single, accessible interface. Designed to deliver ChatGPT Plus-level capabilities at less than half the cost, HelloAI offers tools like text chat, image generation, and web search capability in a simple, clean and familiar UI. The platform solves the limitations of existing AI services - such as ChatGPT Free's strict message caps and high subscription costs, by offering generous usage at competitive pricing, including 1,500 monthly messages for more than half of the cost of ChatGPT Plus - \$8 in the Pro plan and near-unlimited image generation in the free tier. Built with a modern tech stack of React, Vite, TailwindCSS, Supabase, and Stripe, HelloAI integrates Google and GitHub SSO for easy sign-in. It supports a range of advanced models, including GPT-5, Gemini 2.5, GPT-4.1, GPT-4o, o3, and o4. It was brought to live using no-code AI app builders like Github Copilot and Lovable. free pro access to experience the platform.

9 - 10

Age Division



YOUNG ICT - Explorers -

TASMANIA

First Place

9 - 10





YOUNG ICT
- Explorers -

Hell Trail

Parklands High School

Team Members

Graham Diprose, Cristiano Vieira

Project Summary

Hell Trail is a roguelike WWII shooter. This is the first video game we have made using a text-based programming language and GameMaker.



Age Division



YOUNG ICT - Explorers -

VICTORIA
Third Place
9 - 10





YOUNG ICT Explorers

AI Robot Buddy

Xavier College

Team Members

Jack Mahoney

Project Summary

For this project, I built a talking android robot that uses AI to interact with people. It can speak and respond like a real buddy thanks to the coding I did to make the AI work. I designed and 3D printed the head, including a face and an LCD screen that acts as the mouth. I also soldered wires and connected battery packs, an Arduino, and breadboards to power everything. The body is made from LEGO Mindstorms EV3, which I customised to fit the robot's look. The final result is a cool, skin-less android that combines coding, electronics, and creative building into one awesome robot.



9 - 10

Age Division



YOUNG ICT - Explorers -

VICTORIA

Second Place

9 - 10





YOUNG ICT
- Explorers -

ARIA – AI Retail Interaction Assistant

John Monash Science School

Team Members

Tayyab Tahir, Aditya Desai, Jap Anhad Singh Deol, Jerryl Kidagan

Project Summary

ARIA (AI Retail Interaction Assistant) is an advanced AI-powered chatbot designed to revolutionise customer service for online retail businesses. By integrating with Shopify and using natural language processing, ARIA automates menial customer support tasks such as checking order status, cancelling orders, recommending personalised products, and answering detailed product and business-related questions in real time. The chatbot provides a human-like interaction that occurs 24/7, reducing the workload for staff and improving customer satisfaction. Showcased using Based Body Works, a famous men's care retail brand, ARIA shows its ability to handle complex retail scenarios with accuracy and adaptability. This project really signifies how next-gen AI can improve retail operations by delivering personalised and efficient customer support, making it a practical solution for most online retail businesses.



JOHN MONASH
SCIENCE SCHOOL



Age Division



YOUNG ICT - Explorers -

VICTORIA

First Place

9 - 10





YOUNG ICT
- Explorers -

ShallowExplore

John Monash Science School

Team Members

Andy Zeng, Brian Leap, Mor Lang, Adam Wong

Project Summary

With the rapid growth of the internet and widespread access to health data, many now turn to online sources for medical advice. Around 66% of Australians consult online health services for common illnesses before visiting a doctor (Consumer Healthcare Products, 2025). Health Risk Predictors have grown in popularity, allowing users to input risk factors and receive health evaluations. While some, like the iPrevent Breast Cancer Calculator (PeterMac.org, 2025), are backed by reliable data, many others are inaccurate or misleading. Our project, ShallowExplore™, aims to combine accessibility with medically backed data to deliver accurate predictions—specifically for Cardiovascular Disease, Australia’s leading cause of death (HRI, 2025). Trained on reliable datasets like the CDC’s BRFSS (2021), ShallowExplore™ provides a trustworthy, AI-powered Cardiovascular Risk Predictor.



JOHN MONASH
SCIENCE SCHOOL



Age Division



YOUNG ICT - Explorers -

Year 11 – 12

Greg Miller

Partner

Arena Mars





YOUNG ICT - Explorers -

New South Wales

Third Place

11 - 12





YOUNG ICT Explorers

Java Reverse Engineering Tool for Dynamic Analysis

North Sydney Boys High School

Team Members

Roger Du, Franco Wang

Project Summary

We created a tool that uses DLL injection techniques & various native Java Virtual Machine interfaces to analyse Java processes at runtime, including heap information (graphs of heap relationships), setting breakpoints, acquiring class definition data, etc. It allows malware researchers and reverse engineers to understand and analyse obfuscated programs. It has achieved acknowledgement from cybersecurity professionals (e.g. Research group from University of Zaragoza & CTO of National Cybersecurity Centre of the UK in a newsletter).

<https://github.com/roger1337/JDBG>



11 - 12

Age Division



YOUNG ICT - Explorers -

New South Wales

Second Place

11 - 12





YOUNG ICT Explorers

SafeBeacon©

Broughton Anglican College

Team Members

Rohan Jain

Project Summary

In natural disasters, first responders struggle to locate and treat survivors, especially those who are unconscious or unable to call for help, which delays rescue efforts and increases fatality rates. Errors such as administering the wrong blood type or medication further complicate response efforts and can be fatal. SafeBeacon© addresses these challenges with a mobile application that transforms smartphones into emergency beacons, automatically activating when disaster conditions are detected using onboard sensors. To overcome infrastructure failures, SafeBeacon© integrates a local mesh network that ensures survivor-responder communication even without cellular coverage. Augmented reality support allows responders to visualize survivor locations and hazard zones in real time. Survivors can send messages to loved ones, reducing the emotional toll on families and providing closure in worst-case scenarios.



BROUGHTON
ANGLICAN COLLEGE

Life Through Christ

11 - 12

Age Division



YOUNG ICT - Explorers -

New South Wales

First Place

11 - 12





YOUNG ICT - Explorers -

Modeling Contagious Disease Spread: A Network-Based Agent Simulation for Epidemic Control and Public Health Interventions

Girraween High School

Team Members

Dishita Bhattacharya

Project Summary

In today's globally connected society, contagious diseases can spread rapidly through populations, necessitating effective strategies to control outbreaks. This project develops a digital model designed to simulate the spread of infectious diseases, leveraging network theory to mirror the complex web of social interactions that influence disease transmission dynamics. The model creates maps where each point represents an individual within a social network, with lines connecting them to represent social interactions. These connections are dynamic, with points changing colour to reflect a person's health status—whether they are susceptible, exposed, infected, recovered, or deceased—offering a real-time visualisation of the disease's progression. Several critical factors drive the model's behaviour, including the probability of infection, chances of recovery, mortality rates, and the structure of social connections. The interaction matrix is a key feature, dictating the likelihood of contact between individuals and, consequently, influencing the rate at which the disease spreads.



11 - 12

Age Division



YOUNG ICT - Explorers -

South East Queensland
Third Place

11 - 12





YOUNG ICT - Explorers -

Brisbane 2032 Inspire

Brisbane Girls Grammar School

Team Members

Amelia Loye, Stephanie Ku

Project Summary

In anticipation of the Brisbane 2032 Olympic and Paralympic Games, a dynamic digital hub is proposed to inspire interest in sport and promote Olympic values to the next generation. The “Brisbane 2032 Inspire” web application will provide an engaging platform giving schools and researchers access to historical Olympic athlete data to explore past performances and foster sporting excellence.

The system will feature a landing page with key Brisbane facts and Olympic data visualisations accessible to the public. Registered users can search athlete or event data by criteria such as name, gender, and sport, while an integrated OpenAI chatbot will further extend research capabilities. This innovative platform will combine historical data, interactive features, and AI to educate, engage, and inspire the community in the spirit of Brisbane 2032 Games.



BRISBANE GIRLS GRAMMAR SCHOOL

11 - 12

Age Division



YOUNG ICT - Explorers -

South East Queensland

Second Place

11 - 12





YOUNG ICT
- Explorers -

Cash Clarity

Gladstone State High School

Team Members

Stevi Cameron, William Mapleson, Thomas Riley, Evan Ballantyne

Project Summary

Cash Clarity is a digital solution designed to educate people about financial literacy. Cash Clarity specifically teaches the user how to save money, file tax, manage spending and invest for maximum return. The digital solution is an app for the purposes of usability, expense, data usage and security.



Age Division



YOUNG ICT - Explorers -

South East Queensland

First Place

11 - 12





YOUNG ICT
- Explorers -

Appletopia

Brisbane Girls Grammar School

Team Members

Isabella Wang

Project Summary

Appletopia is a web-based interactive learning object (ILO) designed to help primary school students develop basic math skills through engaging, game-based learning. As digital tools become increasingly prevalent in education, Appletopia offers an effective solution for students to learn, practice, and apply key classroom concepts in an interactive format.



BRISBANE GIRLS GRAMMAR SCHOOL



Age Division



YOUNG ICT - Explorers -

Victoria
Third Place
11 - 12





YOUNG ICT
- Explorers -

Brain Grow AI – Short form video learning

John Monash Science School

Team Members

Jinglin Yang, Jacob Poon

Project Summary

Brain Grow AI is a Platform for short form video content for the purpose of education. The platform is used for educational content in many fields, where users can build a variety of general or specialized knowledge through scrolling, or be able to keep up with the latest state-of-the-art advancements and news in many fields of study.

Many of the current short-form media platforms use specialized designed environments to capture the attention of users for hours on end by utilizing the rewards system in the brain to attract using emotional narratives; they use this to drive the attention economy and drive value. We use this to make people more knowledgeable.



JOHN MONASH
SCIENCE SCHOOL



Age Division



YOUNG ICT - Explorers -

Victoria

Second Place

11 - 12





YOUNG ICT
- Explorers -

Eco-Solve: The eco-friendly solutions website everyone needs and loves

John Monash Science School

Team Members

Arnav Bagal

Project Summary

Eco-Solve is an environmental education website where users can learn more about the environment and make more sustainable choices. To do this, users can watch videos, take quizzes, play games, and even set their own personal sustainability goals. The underlying intention of the project was to educate users about the environment. The initial idea was to make quizzes, which then changed to making a mini-game. Over time, it incorporated more features, such as videos and a goal-setting menu as well. But the final and current idea involves combining all of the above to make a website that contains videos, quizzes, a mini-game and a personal tracker to make the most engaging product so far under the name of Eco-Solve.



JOHN MONASH
SCIENCE SCHOOL



Age Division



YOUNG ICT - Explorers -

Victoria
First Place
11 - 12





YOUNG ICT
- Explorers -

Finger Linkage Tracker

John Monash Science School

Team Members

Ryan Wee, Ayden Yak, Jian-Yu Lee

Project Summary

This is a sensor that tracks the position of fingertips relative to one's hand. It is designed to be inexpensive and to feature high-school-level electronic and mechanical concepts. It has the potential for wireless capabilities and software allowing more sophisticated position tracking.



JOHN MONASH
SCIENCE SCHOOL



Age Division



YOUNG ICT - Explorers -

Australian Capital Territory

Third Place

11 - 12





YOUNG ICT - Explorers -

AEGIS- Disaster relief and rescue robot

Burgmann Anglican School

Team Members

Jaydon Ruan, Amish Yadav, Aditya Patni, Austin Xu

Project Summary

Disaster relief faces critical challenges in saving lives as locating and reaching victims is often extremely difficult or impossible in rugged terrains under severe conditions such as blizzards or fires. AEGIS is a 1.5m wingspan hexapodal robot designed to traverse rough terrains, locate victims and guide rescue vehicles to these locations. The additional legs and low centre of gravity allows AEGIS to maintain balance and move across perforated terrain with higher efficiency than a quadruped. A 100W LED mounted on a dual axis gimbal allows dark areas to be effectively illuminated. To locate individuals where visibility is limited, an IR camera is used to enhance detection of human presence. Guiding rescue vehicles and alerting the attention of victims in situations where sound is negligible is achieved through short, selective bursts of twelve 100W LEDs arrays selectively positioned on the hexapod through the discharge of supercapacitors. To complete extended journeys isolated from external power sources, AEGIS is equipped with solar panels.



BURGMANN
ANGLICAN SCHOOL
GRACE COMMITMENT WISDOM

11 - 12

Age Division



YOUNG ICT - Explorers -

Australian Capital Territory

Second Place

11 - 12





YOUNG ICT
- Explorers -

Using CNNs for Breast Cancer Histology Detection

Burgmann Anglican School

Team Members

Shree Jonnalagadda

Project Summary

My project is a hybrid Convolutional Neural Network (CNN) built using PyTorch that integrates ResNet-18 and TinyVGG to classify the microscopic breast tissue images from the BreakHis dataset as either Malignant or Benign. I have replaced the last layer of ResNet-18 with a classifier head inspired by TinyVGG. Hence, ResNet-18 is used as the feature extractor; which is a model well suited for histology tasks. This architecture optimises the classification performance, ensuring accurate predictions. The complex feature extraction in combination with the lightweight classification effectively prevents overfitting, improves generalisation, producing a high testing accuracy of 97%. However, in order for the CNN to be evaluated on the testing data, extensive preprocessing is applied to the dataset beforehand. The images are transformed into 2 versions: augmented and non-augmented data. Both versions are used during training, and multiple training epochs are performed on each. After training, the version (augmented or non-augmented) that results in the highest accuracy on the training data is used in the testing stage, when generating predictions.



BURGMANN
ANGLICAN SCHOOL
GRACE COMMITMENT WISDOM

11 - 12

Age Division



YOUNG ICT - Explorers -

Australian Capital Territory

First Place

11 - 12





YOUNG ICT
- Explorers -

SpaceLauncher- Electromagnetic projectile accelerator (concept)

Burgmann Anglican School

Team Members

*Jaydon Ruan, Thomas Warton, Anbazhagan Arulmugavarathan,
Tharun Kugan*

Project Summary

A significant limiting factor in the advancement of space technology is the inability of small companies to launch satellites to space. Spacelauncher is an electromagnetic orbital launcher designed to provide this service with minimal launch cost and powered by renewable energy. The launcher functions using 3 solenoids lined along a launch path. When magnetic fields are generated through these solenoids, it attracts a payload, accelerating it with each solenoid. Spacelauncher can move across the pitch axis, adjusting angle to determine the trajectory of the payload. To increase ease-of-use, the launcher is controlled using a movement tracking glove consisting of flex sensors and gyroscope. Movement of the arm is correlated to pitch movement, and is displayed on an LCD screen



BURGMANN
ANGLICAN SCHOOL
GRACE COMMITMENT WISDOM

11 - 12

Age Division



YOUNG ICT - Explorers -

North Queensland

First Place

11 - 12





YOUNG ICT - Explorers -

AI wise

Townsville State High School

Team Members

Arabelle Furnell, Evie Martin, Sophee Lepinath, Sophia Moloney

Project Summary

The AI Wise app was made in response to the issue of the already pressing matter of abuse of AI in the schooling system. The app outlines the types of AI, how to write a prompt for AI, fact checking the information given by AI, the ethics behind AI, more information from sources regarding AI and quizzes that test the user's knowledge. The app is designed for students of all ages; not to discourage them from using the tool but to inform them on how to utilise it in their work and other aspects of their lives. With technology evolving at such an exponential rate, it has become impossible to predict what our future looks like. GenAI is less than three years old, yet despite this it is a consistent issue in the education system. It is crucial that knowledge and structure around the use of GenAI is employed to reduce the long-term harmful ramifications, as technology has already become a part of everyday life.



11 - 12

Age Division



YOUNG ICT - Explorers -

Western Australia

First Place

11 - 12





YOUNG ICT
- Explorers -

Hydro Recycle Data Centre Cooling

Perth College

Team Members

Jing Jing Huynh

Project Summary

Hydro Recycle Cooling is an add-on feature for existing data centre liquid cooling systems that will allow the coolant to be recycled while generating extra energy to offset the data centre's impact on the electrical grid. I chose to develop this in response to the growing use of AI which means that data centres are becoming more energy and water intensive. This not only causes severe environmental impact but also hinders technological advancement if it is coming at the cost of our planet. By offering a way to offset energy and recycle coolants, Hydro Recycle Cooling provides a solution to the environmental challenges faced by data centres.



Perth College
ANGLICAN SCHOOL FOR GIRLS

11 - 12

Age Division



YOUNG ICT - Explorers -

BEST USE of AI
Highly Commended





YOUNG ICT - Explorers -

Marine Guard

Perth College

Team Members

Anna Goode, Audrey Weisz

Project Summary

Currently, people think sharks are fearsome monsters, and they are using shark nets and killing sharks to protect people at beaches. Humans kill an estimated 100 million sharks every year. That's an average of almost 274, sharks every day, over 11,000 sharks every hour, or around three sharks every second. We wanted to develop a solution which would protect people from sharks, without harming sharks or other marine life. Marine Guard is our solution. Marine Guard will use an autonomous solar powered sailboat as an aircraft carrier for drones which will report shark movements. Marine Guard can use this information to track sharks, and use a machine learning model to predict future shark activity. Using this information, Marine Guard will provide a “shark forecast” and local shark alerts to warn people at beaches of sharks.



Perth College
ANGLICAN SCHOOL FOR GIRLS

5 - 6

Age Division



YOUNG ICT - Explorers -

BEST USE of AI Junior (3 - 6 category)





YOUNG ICT Explorers

Lumi – The AI-Powered Digital Pet Companion for Kids

Riverton Primary School

Team Members

Devi Kamath, Meera Kamath

Project Summary

Lumi is a next-generation digital pet designed by two young sisters, Devi (11) and Meera (8), to make screen time safer, smarter, and more supportive for kids. Appearing as a fluffy cat or a friendly golden puppy, Lumi comes to life the moment a child logs in—and stays present until they log out. Lumi walks across the screen, reads when it's study time, chases fish at meal time, and nudges kids to take breaks or go for a walk. It plays fetch, can be dressed up, and shares joy and companionship. But beneath the cuteness lies a super-intelligent AI engine that makes Lumi a true digital guardian and emotional ally.



**RIVERTON
PRIMARY CAMPUS**
INDEPENDENT PUBLIC SCHOOL

5 - 6

Age Division



YOUNG ICT - Explorers -

BEST USE of AI Middle (7 - 9 category)





YOUNG ICT - Explorers -

EduAssist

St. Philip's Christian College - Waratah

Team Members

Nathaniel Chandler

Project Summary

EduAssist is designed for high school students to improve their motivation and quality of learning in class. It is an AI RAG tool, as well as a task setting tool that instinctively identifies the academic issues they are having. It can read students' textbooks, and when they ask questions, it accesses information directly from the curriculum to assist students in their studies. What sets it apart from other AI tools (like ChatGPT) is that it coaches a student to find the answer for themselves, rather than providing the answer. Therefore, it is training students to think, rather than doing the thinking for them. EduAssist is able to give students examples, set questions from their textbooks to allow retrieval practice and application, acting like their personal tutor.



7 - 8

Age Division



YOUNG ICT - Explorers -

BEST USE of AI Senior (10 - 12 category)





YOUNG ICT
- Explorers -

Bunjil Lantana Trust: stage 0

Independent Entry

Team Members

Ruhan Sanjay

Project Summary

The main project is centered on a circular economy, where Lantana camara stems are repurposed to construct basic furniture. Stage 0 focuses on building software to accurately detect Lantana camara plants in regions where manual access is difficult. Using a YOLOv8 deep learning model, trained on a custom dataset of 9,000 images—collected, annotated, and augmented—we achieved a mean average precision (mAP) of 89. This enables precise identification of various lantana types across Australia. To enhance field usability, we integrated What3Words geolocation, allowing each plant's position to be tagged with a unique 3-word address. A terrain classification model was also developed to distinguish between cuttable and non-cuttable areas (e.g., meadows vs. rivers), achieving 99% accuracy. This allows us to understand whether manual removal is possible.

9 - 10

Age Division



YOUNG ICT - Explorers -

Sustainability Prize





YOUNG ICT
- Explorers -

Extinct to Exist – DOSBox Dinosaurs Roar Again

Whittlesea Tech School

Team Members

Dennis Joseph, Jiya Sekhri, Nimrit Chahal

Project Summary

In many Australian school many students are required to purchase iPad or computers as part of their school curriculum. This a significant financial burden for families. Computers also have to be changed every three to two years contributing to an e-waste issue. We think this is very wasteful and unsustainable.

Our team decided to travel back in time—to the digital dinosaur age. We decided to see if we could get old computers and install Linux and also old educational software from the DOS era (dinosaur software). We installed Lubuntu on old laptops to make them ran as fast as a modern laptop. We then created an offline repository for productivity software such as Scratch, DOSBox, Evince and python.



WHITTLESEA
TECH
SCHOOL

7 - 8

Age Division



YOUNG ICT - Explorers -

National Finals Awards Announcements

28 November 2025

1pm AEST

