

Year 3 - 4

Greg Miller
Partner
Arena Mars













### Third Place























### 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.







# Second Place























# Backpack Scanner 2.0 - The Backpack Scanner App

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.







### First Place























#### 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 thisrobot since during some parts of the d ay, 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.







Year 5 - 6

Lorelie Oswald
Solution Architect
ANZ SAP













### Third Place























### **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.







# Second Place

5 - 6























#### **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.







### First Place























#### **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.







Year 7 - 8

Muhammad Bilal Amin Senior Lecturer in ICT University of Tasmania













### Third Place























# 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.







# Second Place























#### **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.







### First Place























#### **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/







Year 9 - 10

Selvam MK Venugopal
Senior Customer Success Partner &
APAC Strategic Advisor - Finance & Spend Management
SAP Australia & New Zealand













### Third Place

9 - 10























### **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.



9 - 10 Age Division



### Second Place

9 - 10























### **Bunjil Lantana Trust: stage 0**

The Ponds High School

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.







### First Place

9 - 10























### HelloAl - Al designed for everyone.

Independent Entry

Team Members
Hayden Kong

### Project Summary

HelloAl is an affordable, user-friendly Al platform that brings the latest models from OpenAl and Google to a single, accessible interface. Designed to deliver ChatGPT Plus-level capabilities at less than half the cost, HelloAl 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 Al 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, HelloAl 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-40, o3, and o4. It was brought to live using no-code Al app builders like Github Copilot and Lovable. free pro access to experience the platform.





### Year 11 - 12

Jen Williams

SAP Business Network Customer Growth and Adoption Expert -Supply Center of Excellence Region Lead, SAP













### Third Place

11 - 12























# 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







### Second Place

11 - 12























### **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.



11 - 12 Age Division



### First Place























# **Engineering a Scalable Agent-Based Disease Spread Model for Pandemic Response**

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.







# Congratulations To all our placeholders and recipients

See you in 2026









