

Tim Wilson, Year 12, Barker College, NSW - designed a soft robotic toy to help young adolescents get to sleep faster. [Tim's Profile](#)

Yemi Olaitan, Year 12, Redeemer Baptist School, NSW - designed the world's first concave-backed nesting box that fits snugly into a tree, utilising its thermoregulatory properties, to help preserve native animals. [Yemi's Profile](#)

Isabelle Aduna, Year 10, Wellington Girls' College, NZ - repurposed organic waste to produce efficient and eco-friendly dye-sensitised solar cells. [Isabelle's Profile](#)

Cathy Zhang, Year 11, James Ruse Agricultural High School, NSW - used a 3D modelling technique to explain the unusually high sulphur content on Mars, utilising volcanic dynamics found on Earth. [Cathy's Profile](#)

Lily Rofail, Year 10, PLC Sydney, NSW - used the biomimicry inspiration of drag reducing denticles found on shark skin to similarly reduce drag on trucks. [Lily's Profile](#)

Anubhav Ammangi, Year 12, Redeemer Baptist School, NSW - developed computer programs to determine the ratio between the fractal dimension of a leaf's vein structure and a leaf's height and found this ratio to be a novel species characteristic for plant taxonomy. [Anubhav's Profile](#)

Chloe Yaan Yuit Yew, Year 9, Norwood International High School, SA - explored how glycerine and agar concentrations affect mechanical and physical properties of algal bioplastics to make them more viable for commercial use. [Chloe's Profile](#)

Naman Doshi, Year 12, North Sydney Boys High School, NSW - developed AutoFlow, a collaborative navigation algorithm, that minimises traffic congestion and emissions with prioritized path planning and predictive simulation. [Naman's Profile](#)

Jonathon Zhong, Year 12, James Ruse Agricultural High School, NSW - used computer simulations of four different atmospheric condition types to predict the atmospheric composition of exoplanet LHS 1140b, suspected to have liquid water, that could be later verified by the James Webb Space Telescope. [Jonathon's Profile](#)

Jesse Rumball Smith, Year 12, Wellington College, NZ - has psychologically examined the qualities of the perfect co-pilot to develop a safe driving app that combines the best aspects of human perception and computational capabilities to keep you safe on the road. [Jesse's Profile](#)