TEENTECH® AWARDS

SUPPORTED BY

amazon · AMDEA The Association of Manufacturers of Domestic Appliances · aws · Commvault · RECRUITMENT · HALEON · intellilogix · NHS Shared Business Services · ORACLE · SSCL · sopra steria



FRIDAY 26TH JUNE 2026
IET LONDON: SAVOY PLACE

WHAT THEY SAY...

What I've enjoyed most about the TeenTech Awards is that it made me look beyond the syllabus, and actually build something real. At first it was challenging, but as I started researching and making my product, I realised how fun it is to learn new things when they can also help other people. It felt really rewarding when my idea started coming together and of course coming to the finals.

- Student



I've learnt so much about the airport industry, it's mind-boggling! TeenTech has taught me how to present my work in a clear way, while still conveying my passion to passionate judges.

- Student



The part I enjoyed most was designing and programming the minigames. I found it exciting to transform simple eye exercises into interactive challenges. At the beginning of development, progress felt slow, and I often saw only small results after weeks of effort, which was frustrating. However, over time, I realised that consistent effort leads to visible improvement. This project taught me patience and reinforced the idea that skills develop gradually through persistence.

- Student

Working on my project has taught me much more than just how to design an app - it has changed the way I think about technology and its role in the real world. One of the biggest things I learned is that technology is most powerful when it changes behaviour, not just when it provides information. Before this project, I thought of apps mainly as tools or entertainment. Now I see that they can influence habits and make a real-world impact—like encouraging people to explore nature and care about conservation.

- Student





As staff, we have thoroughly enjoyed supporting the students throughout their TeenTech Awards journey. It has been inspiring to see their creativity, determination, teamwork, and problem-solving skills develop as they refined their idea and prepared their project. The students have demonstrated maturity and resilience at every stage of the process, embracing feedback and continuously improving their work. Reaching the National Final is a testament to their hard work and commitment, and it has been a privilege to watch them grow in confidence while representing the school so positively. We are incredibly proud of what they have achieved and look forward to seeing them showcase their project on the national stage.

- Teacher



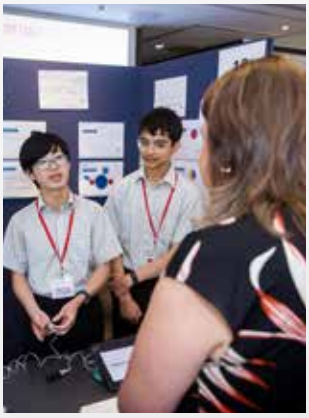
I have particularly enjoyed seeing students engage with real world problems and develop innovative, purposeful solutions. They have provided a fantastic platform for creativity, collaboration and independent thinking in our Compass lessons, where this is not ordinarily formally supported elsewhere, and it has been incredibly rewarding to watch students grow in confidence as they share their ideas with a wider audience

- Teacher

Working on my project taught me that technology can solve everyday problems in very practical and meaningful ways. Before this project, line learning felt like a personal frustration experienced by performers, but through developing this website I began to see it as a design problem that could be improved through technology. I learned that building something useful requires much more than just coding. It also involves understanding the people you are designing for, testing ideas in the real world, listening to feedback, and being willing to change your approach. Speaking to over 30 possible users helped me realise that even a simple tool can have many different requirements depending on who is using it.

- Student





Throughout our project, we have gained a deeper understanding of the poverty trap from a global perspective and have been taught to break complex problems down into smaller sectors and interventions, such as education, healthcare, and economic models. Our research skills have been significantly enhanced throughout the project, particularly in finding numerical data to support our hypothesis. Given that South Sudan is severely underdeveloped, gathering high-quality, reliable data is remarkably difficult when connectivity with other countries is limited. We are also aware of the importance of interpreting data comprehensively and developing well-supported elaborations with clear conclusions, to strengthen our essays and present them analytically.

- Student

From my point of view the feedback from the sponsors is perhaps the most important part of the process for the pupils. To get good quality objective feedback from real people really raises the bar of the Awards above other similar opportunities the pupils might have. The quality and extent of the feedback this year has been the best I have seen since I have been involved in the TeenTech Awards and the pupils really do appreciate it.

- Teacher

This year has been the most impressive in the amount and quality of feedback. The feedback demonstrated great personal interest and is a valuable contribution. It also gives value to the learners' projects as they see that experts have taken the time to comment and appreciate their work.

- Teacher



WELCOME FROM MAGGIE PHILBIN



I'm so proud to welcome you to this year's TeenTech Awards celebration. Whether you are a student, a teacher, a sponsor, a judge or a VIP guest, you cannot fail to be inspired by the creativity and innovation in the projects showcased today.

The TeenTech Awards empower young people, offering a unique platform for students to explore exciting ideas, tackle real-world challenges, and develop skills that will help shape their future. The innovators of the future are here today.

Alan Milburn's recent report highlighted how breaking down barriers and creating fairer access to opportunity for young people has never been more urgent. At TeenTech, we have always been committed to addressing these concerns head-on.

Our Award programme runs year-round, enabling thousands of young people who are inspired by our Festivals, Innovation Days and Masterclasses to develop their ideas with support from industry mentors

They are part of our ongoing work to inspire, empower, and support every young person, regardless of background, to explore and thrive in the fast-evolving world of science, technology, and innovation. We are determined to ensure that talent and ambition, not postcode or circumstance, shape the future of tomorrow's innovators.

1696 students worked on projects, 1032 identified as female, 677 as male, 2 non-binary, and 1 other.

76 teams comprising 148 students have been invited to showcase their work, comprising 97 who identify as female, 49 male, and 2 prefer not to say.

As finalists, celebrate your achievements and remember your ideas truly matter. On behalf of everyone at TeenTech, I wish you the very best of luck. Remember this is only the beginning.

One of the members of our Young Advisory Board remarked, 'Every time I come to TeenTech I feel like another door has been opened for me'. A heartfelt thank you to all our TeenTech Award partners, our mentors, judges who are opening so many doors, giving our students new insights and a valuable network for the future. If you would like to join them, please get in touch.

THE TEENTECH AWARDS TEAM

Maggie Philbin
Kay Sawbridge
Sally Dixon
Kathy Dare
Belinda Shelton
Ali Maggs
Tom Walbrin
Andy Wilson
Kate Bevan
Darren Thomson
Erem Kassim-Lakha
Bill Walker
Sandra Cooper
Andy Quested
Veronica Thorne
Natasha Ramsden
Martin Dare
Harry Ortmans
Rose McVeigh
Sarah Gunn
Andy Moore
Darren Thomson
Della Burnside
Polly Dysterre-Clark

TEENTECH AWARDS JUDGES

The TeenTech Awards encourage students to explore future industries, understand global issues and develop skills whilst discovering their potential to succeed. Students develop projects from autumn through spring, following a structured approach before electronic submission for judging.

We extend our heartfelt gratitude to our exceptional panel of 88 judges who have generously given their time and expertise. These industry leaders, academics and specialists from technology, healthcare, education, automotive, aerospace and other sectors have provided invaluable evaluation and feedback to our young innovators.

Judges looked for original ideas demonstrating thorough research, clear market understanding and evidence of industry collaboration. They awarded Contender, Bronze, Silver and Gold certificates with individual feedback to every participant. The leading projects in each category will showcase their work today.

Abiola Abiodun (AtkinsRéalis)
Akhtar Fiayz Ahmed (AWS)
Robert Alford (UKNNL)
Megan Atkins (Kantar)
Dave Baker (Freelance)
Chloe Barnicoat (Tosca)
Sayoni Batabyal (Haleon)
Lucy Batley (Traction Industries)
Katie Baverstock-Hunt (UKNNL)
Charlotte Beadsmoore (Oracle)
Jess Berry (Babcock International)
Miles Berry (University of Roehampton)
Kate Bevan (InfoSys)
Lisa Bingley (MTI)
Alisdair Bowie (Horiba MIRA)
Ruby Bunker (Tilbury Douglas)
Neil Calder (Engineered Capabilities)
Victoria Campbell (UKNNL)
Miles Chapman (Benchling)
Matt Clementson (Benchling)
Evan Davis (BBC)
Martha Delehanty (Commvault)
David Dutton (UKNNL)
Jennifer Emerson (Commvault)
Livia Featherstone (UKNNL)
Anni Feng (Hoare Lea)
Beth Fitzpatrick (AtkinsRéalis)
Jane Frankland (Knewstart)
Dr Denise Gorse (University College London)
Paul Gribbon (Retired/DMU Alumni)
Brendan Griffin (Oracle)
Joanne Hardy (TTS (RMPLC))
Teresa Harris-Boag (Education Specialist)
Kerry Harrison (Lancashire Digital Skills Partnership)
Iva Hauptmannova (Research Untangled)
Stefan Hay (AMDEA)
Alistair Heath (Hapcha)
Martin Hewitt (Fuellers)
Rebecca Hildreth (AMDEA)
Georgina Hodgkinson (Ask DT Software House)
Jennifer Hodgson (Institute of Cancer Research)
Andy Husband (TTS (RMPLC))
Estelle Johannes (Global Technology Industry Association (GTIA))
Paul Knight (UKNNL)
Andy Kiln (Sopra Steria)
Thomas King (Kantar)
Dominique Kwiatkowska (NHS SBS)
Anson Lai (AWS)
Dyanne Lerardo (KuDeTa Consulting)
Joyce Li (Cardiff University/Deloitte)
Laura Lucas (Sopra Steria)
Vicky McNally (Benchling)
Rose McVeigh (Benchling)
Kerrie Mitchell (Oracle)
Abeera Mohammad (Haleon)
Dr Nicki Morley (Kantar)
James Morris (City St George's University of London)
Joe Moya (SSCL)
Edwina Mullins (DigitalB)
Robbie Murray (Benchling)
Lettie Ndlovu (AWS)
Marco Ndrecaj (Sopra Steria)
Yvette Newbatt (Institute of Cancer Research)
Emma Peacock (UKNNL)
Iain Poole (Fuellers)
Thayer Prime (Team Prime)
Rebecca Reason (Pepsico)
Richard Roberts (Sopra Steria)
Luke Robinson (C9 Recruitment)
Kristen Ryan (AWS)
Sarah Sarkhel (Lion TV)
Andy Seferta (UKNNL)
Avni Solanki (GXO)
Anna Squire (AWS)
Thomas Staley (Sopra Steria)
Richard Standing (Rolls-Royce)
Evelyn Steele (Haleon)
Jo Stow (Sopra Steria)
Andy Sumpter (Sensormatic)
Paul Sutton (NHS SBS)
Huw Swettenham (Kantar)
Adizah Tejani (Oxford University)
Saeed Umar (Lancashire Teaching Hospital)
Sam Wharfe (C9 Recruitment and IntelliLogix)
Tim Whitworth (UKNNL)
Jennifer Whyte (Haleon)
Blaine Williams (Commvault)
Andy Wilson (Dropbox)

ABOUT TEENTECH

TeenTech was set up in 2008 to help young people understand the opportunities in the science, technology, digital and engineering industries, regardless of gender, ethnicity or social background. We support companies, councils, colleges and universities, providing them with strategies of engagement and ways to develop approaches which work well with young people.

Our programmes are carefully planned to engage teachers and parents as they are the main influencers in career decisions. We run a variety of sharply focused initiatives providing students with a coherent, engaging pathway into the industries of the future. They all meet Gatsby benchmarks. Our CEO, Maggie Philbin, has been named Digital Leader of The Year, Most Inspiring Woman in UKIT (Computer Weekly) and has been awarded an OBE and ten honorary degrees for her work with TeenTech.

OUR PROGRAMMES

Are you an innovator? Do you have an idea which could make life easier, simpler, safer or more fun? We want you to use your imagination to think creatively. This is a chance to ask "What if?" or even build a prototype of your idea. The TeenTech Awards are for students aged 11-16 (Years 7 to 11) and 17-19 (Years 12 to 13) working in teams of up to three to look at problems large and small to see if they can find a better way of doing things. This programme is supported by leading global science, technology and engineering companies.

TeenTech Festival days vary in size from innovation and technical workshops to large scale events bringing together students from 30-50 schools across a region with over 140 scientists, technologists and engineers from a wide range of companies for a day of challenges and experiments. We have measured the impact of events since 2008 and know there is a real shift in student perceptions, particularly amongst girls.

TeenTech Innovation Hacks bring the exciting world of science and technology prototyping to school, company and NHS sites. Hosted by well-known science and technology reporters, our interactive sessions are fun, engaging and provide real context to learning, helping young people understand more about careers and the way exciting emerging technology is shaping all aspects of our lives.

Our national programme for students aged 8 to 13 surfacing the "invisible" jobs powering the modern digital city. Our planet requires a radical shift in how we live together. How can we use energy more efficiently? How can we improve infrastructure? How can we live healthier and happier lives? These challenges will require solutions from the next generation of scientists, thinkers and leaders. Welcome to the 'Smarter, Kinder, Safer' TeenTech City of Tomorrow.

Our TeenTech Live virtual programme of sessions have gone from strength to strength. They are hosted by well-known science and technology reporters, and are interactive fun and engaging. Recent sessions have included Animation Masterclasses (featuring guests from Aardman Animations and Industrial Light and Magic), Augmented Reality Masterclasses, Natural Disasters, Sustainability, Accessibility, Space and more! They are free to join and can be watched by entire classes or year groups.

TeenTethics is a Royal Academy of Engineering-funded project that gives young people a voice in engineering ethics. Over 700 TeenTech students worked with engineers, creating a Charter for Ethical Innovation that reflects their values about how technology should be developed and its impact on people and the planet. This youth-created "living document" will evolve with technological change and invites contributions from young people under 25, while also being shared with engineers worldwide to promote ethical practice in the profession.

TEENTECH IN NUMBERS



DIRECT REACH

The number of students involved in TeenTech events every year:

>15,000

INDIRECT REACH

We estimate that through our whole school approach via teaching materials, Young TeenTech Ambassadors, assemblies and our website this rises to:

>75,000

SCHOOL PARTICIPATION

The number of schools participating in our events or using our resources this academic year:

>480

OUR OUTCOMES

- 99.5% Schools and employers who participate in TeenTech programmes say they will 'definitely' do so again.
- 97% teachers say our programmes are useful to extremely useful in developing creativity, teamwork, confidence, and an understanding of the breadth of STEM careers
- 97% say our programmes are useful to extremely useful in developing an understanding that gender, ethnicity and social class need not be a barrier to success.
- 87% teachers say TeenTech improves student confidence about their abilities.
- 90% teachers say TeenTech improves their own knowledge about industry.
- 85 % teachers say we help students refocus their thinking about school subject choices and to consider career paths they never knew existed.
- Our students become TeenTech ambassadors, sharing their experiences with other students, companies and at global conferences
- Data from our initiatives informs and improves all our programmes and is widely shared at conferences, in reports and in the press

SUPPORTING TEENTECH

TeenTech is completely funded by sponsorships and donations. If you would like to make a donation to TeenTech, please get in touch, or scan this QR code to donate via JustGiving.

OUR PARTNERS

AMDEA

The home appliance industry is evolving rapidly, and the next generation will play a vital role in shaping what comes next. AMDEA is committed to nurturing young talent and helping them explore the exciting possibilities of connected, efficient and future ready home technology. The TeenTech Awards provide an inspiring platform for students to develop their skills, test their ideas and gain confidence in their ability to innovate. We are thrilled to support the Next Gen Home Innovation category and to celebrate the exceptional creativity of this year's finalists.

AWS

We are committed to inspiring the future generations of technologists, and encouraging equitable access to careers in technology. Working with TeenTech we hope to dispel some of the misconceptions young people have and ignite their interest in STEM subjects. We are very excited to help the next generation of creative thinkers and future builders find their path by participating in the TeenTech Awards.

C9 RECRUITMENT AND INTELLILOGIX

C9 Recruitment and IntelliLogix are proud to support the Future of Transport category at the TeenTech Awards. Transport is changing quickly. Technology, safety, sustainability, data, infrastructure and people are all becoming more connected than ever. The sector needs fresh thinking, and that has to start by giving young people the confidence to explore real problems and come up with new ideas. That is exactly what TeenTech does. The Awards showcase students who are not just talking about the future, but actively thinking about how it could work better.

As businesses working across recruitment, compliance and technology across the UK transport sector, this category means a lot to us. We see every day how much the sector needs new talent, new ideas and people willing to challenge how things have always been done. We're proud to play a small part in supporting those students, celebrating their work and helping shine a light on the next generation who may help shape the future of transport.

COMMVAULT

Commvault is proud to have sponsored TeenTech for the last year. Today's young innovators are tomorrow's tech superstars. As a company that help customers achieve continuous business in the face of continuous threats, Commvault sees firsthand how creative and tech-savvy young people are becoming. We support TeenTech's incredible work in showing 8-19 year olds that STEM careers can be incredibly exciting and rewarding, there are so many other ways to have a career in Tech beside the obvious.

Commvault is keen to support the generation of the future – the generation that's already creating apps, building robots, coding games, and solving problems in ways that even impress older generations - something which is so evident at these Awards Finals. We understand that the most relevant tech innovations often come from fresh perspectives and bold ideas, which is exactly what young people bring to the table. Supporting TeenTech isn't just about giving back to the community – it's about recognizing that young people aren't just the future of technology, they're already making it happen right now!

HALEON

We know our scientists of the future are in school and college classrooms today. So as an innovative, science-led company, Haleon is enthusiastic about inspiring, educating, recruiting and developing the next generation of talent who will deliver the ground-breaking ideas of the future. TeenTech is a unique partnership and collaboration where young and curious-minded students can continue to pursue their passion in STEM learning.







ORACLE

At Oracle, we believe that innovation thrives when young people are empowered to explore technology with confidence and imagination. Every day we see how data, cloud technologies and AI are transforming the way organisations work and the way society solves its biggest challenges. TeenTech helps young people understand these possibilities early, giving them hands on experiences, industry insight and the encouragement to turn their ideas into real solutions.

NHS SHARED BUSINESS SERVICES

Employing over 1,300 people, we believe that being a values-led organisation is key to making ours a great place to work. Living those values every day, and putting our people first, has led to us being Certified as a Great Place to Work® 2023 and earned us rankings in the UK's Best Workplaces™ for Super Large Organisations, for Women and in Tech.

We also know, supporting people into the health sector offers incredible opportunity and therefore, we are delighted to support TeenTech as an award sponsor as part of our wider Social Value Programme 'Healthy NHS SBS'. This partnership will enable young people across the country to meet our teams, engage in technology and business skills as well as finding out more about the opportunities available at NHS Shared Business Services and the sector we work in.

SOPRA STERIA

Young people not only represent the future but are in a great position to lead the way to change and build a better society. It's critical that we take an avid interest in the next generation workforce – supporting, encouraging, and helping young people to understand how they can drive positive change with technology.

SSCL

As a sponsor and partner of TeenTech, SSCL is keen to support and encourage young people into the STEM industry. SSCL's Values are at the heart of everything we do and this is our opportunity to help people within our local communities into their first job, support a career change, and share the fantastic opportunities we have at SSCL.

SHARING THEIR STORIES TODAY...

- → Rory Cellan-Jones (Journalist and Author)
- → Dallas Campbell (Presenter and Author)
- → Evan Davis (Journalist and Presenter)
- → Hannah Gibson (Diverse Integration)
- → Safa Mehmood (TeenTech Alumna)
- → Zoe Keates (Royal National Orthopaedic Hospital)
- → Victoria Cleland (Chief Cashier, Bank of England)
- → Paul McVeigh (Speakify)
- → Philippa Velija (University of Roehampton)

AWARDS PRESENTATION CEREMONY

Welcome by Maggie Philbin, CEO TeenTech Charity. The ceremony will be hosted by TeenTech Awards alumni, Isabelle and Temiloluwa.

ENERGY & ENVIRONMENT – SUPPORTED BY AMAZON WEB SERVICES

ENERGY GENERATOR BY PRUTHA, DHANVI AND KEYA

Our TeenTech project, Energy Generator, created by Prutha, Keya, and Dhanvi, educates how renewable energy can be produced through motion and electromagnetic principles. The design captures movement using a folded disc that spins to generate mechanical energy, which is transferred through a connecting rod to the inside of a cylinder. Inside, electromagnetic induction occurs as the motion interacts with a magnet and a copper coil, converting kinetic energy into electrical energy. The prototype highlights sustainability, innovation, and accessibility, making it easy for students to understand and replicate.

HOME WATER FILTER TESTING BY JULIA

My aim is to help people in areas without safe drinking water by creating a water system consisting of multiple filtration methods getting rid of things like sediment, chemicals, heavy metals and bacteria both filtering and testing water if it's unsafe to drink, water that gets detected as still undrinkable gets put into the system again repeating so it becomes drinkable.

SARCHS CLEAN-AIR BY OLIVER, ALEXANDER AND SIMON

We are a Year 9 team passionate about a cleaner, more eco-friendly future. Our project is a carbon-capture filter that fits onto a boiler flue or any cylindrical pipe releasing harmful gases, aiming to cut the CO2 produced by UK homes — a standard gas boiler emits around 2.2 tonnes a year, across roughly 23 million UK homes with boilers. The prototype uses amine-functionalised silica and polymer mesh filters to trap CO2, much like a catalytic converter, with a removable slide-out filter system for safe, easy servicing. Using CAD, 3D modelling and 3D printing, we built a full prototype showing how it attaches to a flue and how the filters work inside — making emissions reduction easier for households and capturing harmful gases before they reach the atmosphere.

TRITIUM PRODUCTION MODULE BY SAM, CHING AND ADAM

The future of Nuclear Fusion is dependent on a vital fuel - Tritium. However, a lack of Tritium has bottlenecked research for decades. Our design solves this issue. The Tritium Production Module (TPM) is a fuel-rod sized piece of kit designed to be integrated into existing nuclear reactors, either in place of fuel rods or in non-fuel rod positions. It is designed to breed tritium (as well as Helium) using a reaction between lithium and a neutron.

WEARABLE TECHNOLOGY

CHILLSHIFT BY PRITIGA

My product is a heated blanket that shrivels up to encourage the person using it to wake up. It would be made out of faux fur and or plush fleece. It would also be heated to provide the maximum amount of comfort.

SIGHT SAFETY BY ROBIN AND EVE

Our product consist of a specialist headphone set and following application for the visually impaired and blind, immersively acting as an alternative sight provision that blind people do not have. This new technology provides audio vibratory 3D mapping for dynamic spatial information and experience to avoid or to provide contact with objects. This is through delivering the current environment in real time spatial info to the senses.

RENOWARE BY SHREYA AND MARYAM

RenoWare provides a solution for anticipating when a physical 'crash' is likely for sufferers of Chronic Fatigue Syndrome. Wearables help the user recognise when they are in danger of a crash.

FUTURE OF TRANSPORT - SUPPORTED BY INTELLILOGIX AND C9 RECRUITMENT

CYCLESAFE BY CINDY AND HANA

Our project is CycleSafe, an attachable bicycle safety device that can significantly reduce cycling accidents. It is a 4-in-1 product that connects to an app and includes features such as a turn signal light; a GPS tracker in case of theft or for location tracking; a crash detection and emergency response system; and a radar for blind spots that alerts the cyclist if a car is incoming. The product uses specific technology as well as built-in features found in phones to make the most of existing materials and hardware. We believe CycleSafe holds the future to a safer cycling experience in a field where accident risk is often overlooked.

F-K-L↑FTS LIFTS BY KALLUM AND FREDDIE

F-K-L↑fts is an AI-powered autonomous forklift system designed to transform the UK's £127 billion logistics and warehousing sector. As e-commerce grows, the industry faces major labour shortages, high sickness rates and rising costs, with many firms reporting lost productivity and revenue. Our solution uses double-lift autonomous vehicles that can be deployed and managed by a single operator or small team. Working 24/7 with consistent performance, each vehicle can complete the work of two conventional forklift trucks while reducing labour pressures, improving efficiency and lowering operating costs. The system could also improve workplace safety and support future warehouse automation.

LUXE- STOP BY RUAIRI AND LOGAN

Luxe-Stop is a top of the range luxury bus shelter for exclusive use by app customers. It provides people of all ages with a warm, comfortable, safe place to wait on their bus. It will include features such as low voltage lighting, comfortable seating, security cameras and access to a vending machine. It will be powered as much as possible from renewable energy sources and will be partially funded by sponsorship deals.

PLANE.AERO: A SELF-SUFFICIENT VAWT FOR AIRPORT ENVIRONMENTS BY SIDDHARTH

Plane.Aero is a self-sufficient wind turbine that is airport-compliant, designed to power airports in terms of lighting, general electricity use, and charging of electric vehicles operating on the airfield, all using renewable energy. It allows airports to reduce airport carbon emissions, electricity costs, and reliance on fossil fuels such as coal. Design is under 10m tall, avoiding airplane wings, likely safely placed in buffer zones. Plane.Aero is an optimized vertical-axis design as it captures wind from all directions, maximising efficiency - limited due to Betz's Law. Plane.Aero is novel: minimal noise, vibration, radar interference, and glare - meeting general FAA/ICAO standards.

HEALTH – SUPPORTED BY HALEON

AFABI BY KAWENG

AFABI is a wearable neuroimaging helmet that brings advanced brain mapping out of shielded rooms directly to patients. Combining smart portable hardware with real-time software, it turns quantum brain scanning into a mobile tool for daily life, wards, and emergency transport. The helmet features a dual-mode architecture: Clinical Mode: Optimises sensor sensitivity in stable environments to deliver high-fidelity cortical maps. Ambulatory Mode: Tailored for active environmental nulling in moving ambulances, this mode handles motion and magnetic interference to provide instant seizure alerts. AFABI balances clinical accuracy with rugged portability required for emergency care.

AIRLINK UAV SYSTEM BY KANAV

My project is a low cost autonomous UAV system designed to deliver urgent medical supplies to remote locations with limited infrastructure. To troubleshoot and learn, I designed and tested 4 different types of aircraft, including a large autonomous quadcopter, a rapid response FPV drone, a low cost flying wing built from recycled materials, and my final as a fully autonomous flying wing with GPS waypoint navigation and long range telemetry, cameras and full autopilot. My project aims to provide an affordable and easily scalable method of delivering medicines, vaccines, insulin and blood products. This helps smaller organisations and remote areas improve healthcare access and save lives.

LULLABABY BY OLIVER, FLORENCE AND NOAH

LullaBaby is a smart baby comforter alarm paired with a wristwatch that alerts parents and carers when a baby rolls onto their front during sleep, enabling them to quickly return the baby to a safer back-sleeping position. SIDS (Sudden Infant Death Syndrome) affects an alarming number of babies each year. Front and side sleeping are recognised risk factors with back sleeping considered the safest position for infants. LullaBaby also features a room temperature monitor integrated into a nightlight as overheating and unsuitable room temperatures are also associated with increased SIDS risk. The product is simple to use and requires no technical knowledge.

WATTSUIT BY IZZY, ROSE AND FREYA

Our product is a heated swimsuit that uses ultra-thin, flexible and durable carbon fiber threads that are sewn into the fabric to generate heat without being felt by the wearer. The outside will be made of recycled polyester with elastane to make the swimsuit comfortable and stretchy. As well as that, polyester is UV resistant protecting you from sunburn and an increased risk of skin cancer. The heating would be focused on the abdomen, lower back and if it's a long suit then the thighs. The carbon fibre threads are sewn into fabric in serpentine (zigzag) patterns allowing the fabric to stretch and distribute heat evenly.

SAFETY & SECURITY – SUPPORTED BY COMMVAULT

FLOWTZ BY JESS AND ZOE

A new floatation device created & innovated to save lives and prevent loss of life to drowning.

RESCUE BLADE BY TARA, SIRI AND STELLA

Rescue blade is an advanced seatbelt cutter, which is to be used for those who may ever be in a car crash and need help, which is unfortunately very likely in today's world. This simple gadget consists of a seatbelt cutter (our main focus) , a torch, a button, a tracking device and a microphone, all in one small, compact device on a keychain.

SAFERSTREETS BY TILLIE

A maps app which considers the most appropriate route for you to walk depending on your profile and the context that might affect your journey.

DIGITAL AND DATA SKILLS - SUPPORTED BY ORACLE

AQUA-NETIC BY AVAANI, SCARLET AND ISABEL

Aqua-netic is a state-of-the-art innovation on the everyday hydroelectric power generator, addressing the global energy poverty and lack of clean water that affect 2.2 billion people and cause around 1 million deaths annually. It combines a floating hydroelectric generator with a biosand filtration system to produce both electricity and clean drinking water. An Archimedes screw lifts river water at a 22° angle to drive a copper-wound rotor generating ~480 W of power, while long-life biosand filters remove pathogens to produce ~200 litres of safe water per day. Design decisions were informed by a 395-response survey, scientific research, and analysis of Google Earth and global river-flow data. The result is a resilient machine that can efficiently support riverside villages and indigenous communities worldwide, without harming local flora and fauna.

PULSEEASE BY BIANCA

Stress and anxiety are common among young people. I know the effects of this as a year 11 student about to sit her GCSES. However, people feel stressed due to many different reasons, for example relationship conflicts or major life changes like experiencing grief for the first time. This led me to create a prototype to provide stress relief, in a fun, stylish, and innovative way. My prototype is a spinning necklace that tracks pulse rate changes and provides grounding solutions based on the user's pulse rate. This will work alongside an app which analyses their live data and provides suggestions to enable the user to feel more at ease.

STRESS SENSE BY CHLOE AND ANNABEL

Everybody gets stressed sometimes; some people a little, and some people a lot, so we created a wearable anxiety-support device. It looks like a watch, but it also has a clip so you can attach it to your clothes. The device connects to an app, which helps you to calm down when you're feeling worried or overwhelmed. The app can tell you when to take slow breaths, give you positive reminders, and share simple tips to help you relax. The device can also sense when your heart rate rises and so you know it might be time to pause and breathe. Our goal was to make something small, friendly, and easy to use, so people can feel supported wherever they go.

SUGAR MONSTER ALERT APP BY KIARA

Sugar Monster Alert App is an AI-powered health app designed to help children make smarter food choices in a fun and engaging way. Foods are classified using friendly Sugar Monsters—Green, Yellow, and Red—to help kids easily understand sugar levels and build awareness. The app provides healthier alternatives, educational games, habit-building challenges, and personalized recommendations. It also creates a connected ecosystem between children, parents, and caregivers by enabling progress tracking and sharing. The goal is to promote lifelong healthy eating habits through AI, gamification, and nutrition education.

SKILLS FOR TOMORROW'S WORLD

TEAMWORK

Understanding how to build and work well as a team is a crucial skill. This award recognises the students who demonstrated the ability to work well together.

THINKING BIG AND BOLD

Being able to think differently and having the courage to consider new ways of doing things is a highly valuable skill. It often means taking a risk and having the courage to fail and then try again. This award recognises students who have looked at the world and considered fresh solutions.

TENACITY

Having the inner strength to keep going, even when you hit problems is a real skill for life. Students celebrated in this category have found ways to overcome obstacles.

COMMUNICATION

This award celebrates students who have been able to clearly communicate their ideas, whether in written, oral or visual ways. This is such a vital skill – it doesn't matter how strong your idea is , if you can't find a way of letting others know.

WORKING WELL WITH INDUSTRY

TeenTech actively encourages and supports students to seek feedback and advice from industry experts. Looking beyond your own experience will always make a project stronger and is also a way to build a very useful network for the future. All the teams celebrated in this category have made a serious effort to do this and embrace suggestions and ideas.

BEST INNOVATION (YEARS 7-11) - SUPPORTED BY SOPRA STERIA

BREATHABLE DRAINS BY SAM, COREY AND EDWARD

'Breathable Drains' is an idea for improving air quality and the surrounding environment in urban areas. Inside these drains would be seaweed from many species including the common Ulva 84. Seaweed takes in more Co2 and releases more O2 than land plants do, hence the term 'breathable.' We think this project is innovative because in many urban areas around Great Britain, and even internationally, have poor air quality (London having 32.3µg per cubed meter, 10µg being health limit). This can affect the more sensitive people with health hazards.

CHIC FOREVER BY ELSIE-MAI, ANOOPJOT, LIBBY AND OGO

Chic Forever is a fresh, innovative app designed by our team to bring originality and confidence to your wardrobe. More than just fashion—it's about feeling your best and easing the stress of daily outfit decisions. Our app acts as your personal style assistant, guiding you every day with simplicity and speed.

THE ULTIMATE DOMESTIC ANIMAL BANDAGE BY JESS

My project is designed to eliminate the need for dog and cat cones while ensuring wounds heal fully. It uses a breathable, waterproof bandage made from nylon to allow airflow, keeping the wound dry and reducing infection. A Gore-Tex-style layer adds protection, while elastic seams and poppers ensure comfort. The bandage also includes thermochromic polymers that change colour with heat to show when the animal has been licking. This solution helps pets heal safely while staying comfortable, active, and stress-free.

VELORA BY TAMANNA

This project is a non-diagnostic ovulation detection system designed to identify the absence of a biphasic thermal shift across a menstrual cycle. The system measures basal body temperature daily using a high-precision DS18B20 digital temperature sensor (±0.1°C accuracy).

BEST INNOVATION (YEARS 12-13) - SUPPORTED BY SOPRA STERIA

DRIVELINE BY JOHN

Driveline's purpose solves the issue of not being able to play golf, when the only method of transportation available is bicycle. Driveline is a multifunctional product, which was initially designed to transport golf equipment, to and from the golf course, in a more sustainable way. When arriving at the golf course, the

user is then able to transform the product into a golf trolley to be used on the course, allowing for a more enjoyable game. Since the initial design concept, it has been developed, in order to solve other potential user's problems, in transporting large items by bicycle, making the product a must have for people unable to drive, or those wanting to get more exercise.

HYDROCONVERT BY DENVER, VIKRANTH AND LOUKA

Our project aims to create a self-sufficient mitigation system in flooded areas, such as tunnels and flood basins, utilising the significant water depth of floodwater. Floodwater is collected using a siphon system and is directed into a vertical pipe. The water's initial gravitational potential energy is converted into kinetic energy and accelerates, which drives an axial turbine. The electricity produced is used to power a pump, which transports water away from the flooded area. Our calculations suggest this could generate enough power for a pump system which is efficient to help local environments. It is also environmentally sustainable, without reliance on external power sources.

ROBOFLEET BY MUHAMMAD, FIDA AND REHAN

RoboFleet is a robotics project designed to help people in dangerous and hard-to-reach environments, such as wildfires, landslides, and earthquake zones. The system uses a fleet of autonomous and remotely operated robots and drones that can work together, share information, and coordinate tasks in real time. It is built for challenging conditions like smoke, fire, and disaster areas, RoboFleet focuses on navigation, mapping, and teamwork between robotic units. The project explores how collaborative robotics could support search, monitoring, and emergency-response operations where it may be unsafe for humans to enter.

TERRA BY ISHANTH

My project is a plant-seeding robot aimed for use by students in secondary school. It uses a three step system to measure the soil moisture content of the soil, plant a seed, and water the seed. The robot is controlled by the user using a handheld controller.

FOOD & RETAIL

ECO SMART BIN BY ABBIE

Smart bins use a combination of artificial intelligence (AI), cameras, sensors, and Internet of Things (IoT) connectivity to automate the waste sorting process and optimize waste management. This makes recycling effortless for the user and more efficient for waste management services.

KOOL KATZ CO. BY JASMINE AND LIZZY

We created a sustainable cat ice lolly to keep felines hydrated and cool during summer. The recipe utilizes chicken leg byproducts to create a nutritious, safe broth that minimises waste. The packaging creatively upcycles a Nutella-style tube with vibrant branding inspired by Calypso lollies. Inside, 10 paw-shaped ice cubes are separated by greaseproof paper, allowing pet owners to easily serve individual daily treats.

SAKAI CLEAR BY ROXY, RAFAELLA AND AMANDINE

Microplastics in food are a growing global issue, with limited solutions currently available. Our idea uses the bacteria Ideonella sakaiensis, known for its ability to break down plastic, in a scanning and treatment process on seafood production lines. Freshly caught fish and seafood would be exposed to the bacteria, allowing hidden microplastics to be detected and degraded before reaching consumers. This would improve food safety, reduce health risks such as inflammation and cell damage, and help address the estimated 68,000 microplastic particles consumed by humans each day.

SAVVY SHOPPER BY ALICE, EFFIE AND LUCIA

A smart shopping trolley that utilizes RFID-like technology to adapt to different shopping styles and needs, including an edutainment mode for shoppers with young children.

BEST RESEARCH (YEARS 7-11)

CHLORIFY BY MOHAN, JAMIE AND DARIUS

Our innovation is to create a plant (tree or smaller plant) that contains a higher concentration of chloroplasts and hence more chlorophyll so more photosynthesis takes place per unit space or per unit plant (i.e. greater carbon fixation). This means that we can produce more oxygen and take in more carbon dioxide thus helping the world's current major issue, global warming. At the same time, we can do this without taking up as much expensive and limited land space.

PET MONTER BY ALIZA AND ESHAL

We aim to make a dedicated space for pets and their owners on long sleeper trains. There will be a different space for each type of pet as well as a survey on our website where the owner talks about their pets habits and needs. The train companies can pay us to manufacture our product within the train and because the owner will stay within the same area as their pet, there will stay be a similar amount of seats as usual for the public. Our pet spaces will also make the public feel more comfortable especially those who are allergic or afraid of the animals.

THRIVE BY OLIVIA, JENNIFER AND JOANNE

THRIVE is a pioneering, non-invasive health sensor aiming to tackle long NHS waiting lists through proactive treatment and diagnosis of health conditions and illness. It monitors blood glucose, SPO2, body temperature, heart rate, blood pressure, and respiration rate in order to gauge a broad view of the patient's health, whilst also integrating mental health support, meal planning catered to your health needs, and other custom health goals. THRIVE takes a hostilic approach to healthcare, empowering everyone from healthy people to patients with chronic illnesses.

WOODLANDWARDENS BY EDOUARD, KAVISH AND REUBEN

A spider-like robot whose primary function is to survey trees and report on their health and structural integrity in order to minimize costly storm damage. More broadly, a suite of robots with different shapes adapted to different kinds of woodlands and forests.

BEST RESEARCH (YEARS 12-13)

CARBON COLLECTOR BY ZINO

The 'Carbon Collector' project is an investigation into Carbon Capture, Utilization and Storage (CCUS) methods and technologies which are designed to help mitigate the ever increasing problem of Climate Change, which of lately has been mostly caused by human activities. The project looks into 5 specific techniques: Calcium looping, Thermal decomposition, Photosynthesis, Molten Salt electrolysis and Enhanced rock weathering, looking into their respective advantages and weighing them against their drawbacks. Ultimately, through the consultation of experts, the project proposes a mixed strategy which aims to find the most environmentally friendly and scalable path to a greener future.

PETMEDD SMART BANDAGE BY INDIA, SOPHIA AND SMILLA

Our idea is a smart bandage designed for dogs with chronic wounds caused by conditions such as diabetes, Cushing's syndrome, or bite injuries. The bandage contains sensors that monitor pH, temperature, moisture, and oxygen levels to track healing without removing the dressing. Data is sent to an app where vets and pet owners can monitor recovery progress and receive updates. A hydrogel layer helps maintain a moist healing environment, while the smart design reduces stress for dogs, improves wound care, and minimizes unnecessary veterinary visits.

PORTFOLIO OPTIMISER BY ANJALI

Portfolio Optimiser explores how technology can help people invest more wisely and safely. Using Markowitz's Modern Portfolio Theory and real historical market data, the tool analyses how diversification

affects a portfolio's risk and return, and identifies portfolios with the strongest overall risk-return balance using the Maximum Sharpe Ratio approach. Designed especially for beginners and non-expert users, it not only generates portfolio allocation recommendations, but also makes the reasoning behind them clearer, more transparent, and easier to understand.

POVERTY TRAP BY REEWA, RYANNA AND EUNICE

Many countries in Sub-Saharan Africa face the poverty trap, a cycle where people remain poor due to barriers beyond their control. One major cause is low school attendance, driven by parental resistance and limited access to healthcare. Our project proposes solutions for South Sudan, including free education, improved transport to schools, and greater investment in healthcare services. Initial funding would come from Chinese state-owned enterprises, while long-term development would focus on strengthening free-market mechanisms. These measures can reduce poverty, improve opportunities, and help people reach their full potential.

TENACIS EXOSKELETON BY ABHINAV AND DAN

Last year, 42000 UK Musculoskeletal Disorder (MSD) cases in high risk sectors cost firms £12,000 each. We have worked with Overbury and Morgan Lovell to ensure our data-driven answer to this problem, Tenacis, is tailored to the construction sector: it utilises fully passive systems, is easily stored, is unisex & one-size-fits-all, and folds onto itself for storage. Driven by unique cam-driven & differential mechanisms, Tenacis is designed for quick response batch manufacture, whilst also allowing the torque profile to be highly bespoke to the type of work conducted. Tenacis is 5-9 times more cost efficient than leaders in this emerging market, offering a high-ROI alternative.

NEXT GEN HOME INNOVATION - SUPPORTED BY AMDEA

AQUALUX ALARM CLOCK BY ADYANSH AND AARAV

We've all been there. The alarm screams. You hit snooze and wake up forty minutes late, groggy and dehydrated. AquaLux is a battery-powered IoT alarm that ensures you're actually awake. It has its own wireless network, set your alarm from any phone or browser, no app needed. The 1st sensor is a photoresistor that checks whether the room light is on, making sure you're awake. The 2nd is a spring-loaded platform with an IR sensor. Fill the bottle overnight. AquaLux only stops once you've drunk it and replaced it. Built from salvaged components, this fully functional prototype is ready for production. A truly good morning doesn't begin with snooze. It begins with light, water, and intention.

COMPOSTER BY HANNAH AND FREYA

We wanted to create something that helps people live better lives while also helping the planet. Our idea is a solar-powered AI composter clip that attaches to your food bin and gives personalised tips, advice and rewards to help reduce food waste. Using a small camera and an app with a Q&A bot, waste-reduction ideas and a points system, we want to make being environmentally friendly easier and more accessible for everyone. As we said in our project, "being green shouldn't be a chore or a luxury – it should be effortless."

FOCUS LAMP BY SIENNA, FLORENCE AND POPPY

The focus lamp is aimed to improve the way in which we study at home. This lamp has built in colour noise (a sound put on a noise power spectrum and have corresponding names for the spectral profile)and other focus enhancing noises to keep you locked in on homework and a slot for your phone (not locked) so you can be distraction free.

SOILBUDDY BY RIAN, BAPTISTE AND MATTEO

SoilBuddy is a smart plant pot system integrating electronics hardware, MicroPython firmware, a Cloudflare backend, and an iOS app. A custom pot houses four sensors tracking soil moisture (capacitive), temperature, humidity (BME280), and light (TSL2591). When moisture drops below a set threshold, or via manual app command, an automated submersible pump waters the plant. Sensor data syncs in real time to the cloud, allowing users to monitor live readings and trigger watering globally. Additionally, an in-app Core ML image classifier (trained via CreateML) identifies five plant species from photos to automatically suggest ideal moisture targets.

ULTRA-FRIDGE BY MAISON AND JUDE

Our project is about a fridge that can scan food into the fridge to make recipes for dinner/lunch. The fridge can detect which food is out of date and will notify you via the app. Scanners are built into the door of the fridge, so when you place the food into the fridge it will scan all the food giving you ideas for meals and expiry dates. If set up the fridge can order milk/fruit when it has expired to always keep your favourite food in the fridge. The fridge has a screen on the front where you can see meal ideas and can be used as a family calendar.

CREATIVE AND DIGITAL MEDIA - SUPPORTED BY AMAZON

CAPYBUDDY BY RAE, ALEXANDRA AND ELIZA

Capybuddy is a pupil-led app designed to connect students with trained peer mentors matched to their individual needs. Inspired by the intuitive matching approach of dating apps, it uses digital tools and AI to create accessible, personalised support pathways. While mentoring exists in schools, Capybuddy lowers barriers for those who may lack confidence to seek help, making support more inclusive and immediate. The name reflects the calm, sociable nature of capybaras, symbolising a safe, welcoming environment. It is a thoughtful, realistic concept with strong potential for meaningful impact in everyday school life.

OFFSCRIPT BY EMMA

OffScript is an open-source line-learning website designed to help students and performers memorise scripts more effectively, independently, and with greater confidence. Many young actors currently rely on parents, teachers, or friends to read lines back to them, or they use paper-based repetition techniques that can feel repetitive and inefficient. These methods are often inconvenient, inconsistent, and not always available when needed. OffScript addresses this problem by providing a simple, distraction-free digital platform where users can practise their lines interactively, anytime and anywhere.

SMART SHOPPER BY ELLA LOUISE AND SCARLETT

As life today is extremely fast paced and everyone is always so busy it is sometimes difficult to find the time for family meals that are DIFFERENT and TASTY.... You don't have time to always quickly go to the shops, you then look in the fridge, freezer and cupboards to find it's EMPTY.... When you do find something, you fancy – it has passed its EXPIRY date, without you even knowing.... If only there was something that could help you with all of these challenges... Say hello to SMARTSHOPPER

PATIENT SAFETY – SUPPORTED BY NHS SHARED BUSINESS SERVICES

BETWEENUS BY JESSIE, MAISIE AND ERIN

We have produced the idea of an app that helps you with your mental health. By having an app that will link you up to someone with similar worries, struggles and queries while keeping you both anonymous. To start, you will fill in a survey about your current mental health status, and it will automatically pair you with someone who has similar answers.

HEARTSHOT BY AMRUTA

HeartShot is a few-shot learning system for ECG-based cardiac diagnosis of myocardial infarction, conduction disturbances, and hypertrophy. It uses a 1D-CNN encoder to extract features from raw ECG signals, paired with a prototypical network that classifies conditions from very few labeled examples. Pre-trained on large public ECG databases and fine-tuned on small support sets, it mimics real clinical scenarios where labeled data is scarce. SHAP-based explainability highlights which ECG features drive each diagnosis, making the system interpretable for clinicians. HeartShot aims to bring expert-level cardiac care to underserved settings worldwide.

MEDX BY TALYA, GEORGE AND PAAVNI

MedX is a smart machine that accurately dispenses and labels multiple prescriptions simultaneously for pharmacists. It can be connected to a centralised database of patient prescriptions or scan individual scripts. This eliminates the risk of human error and contamination, and increases the efficiency of packaging prescriptions. The product caters to pharmacists in developing countries, as they are more likely to be overworked and make mistakes. To account for unreliable electricity supplies and lower median incomes we made the machine self-sufficient, running on solar power. Our product is also a fraction of the price of others, making it more accessible.

MOODSCAN BY REEM AND KOKO

Our design is a wearable accessory which can read facial expressions and inform the wearer of the emotions of those around them, such as surprise, anger, or fear. Our vision for the product is for it to be able to recognise a wide span of micro-expressions and for it to be worn in a variety of social situations. It includes a subtle earpiece or a tactile sensor so as to discreetly inform the wearer of the emotions of the people with whom they are interacting are displaying. We would market this idea to people with ASD who often struggle with recognising certain emotions and the blind community who may not be able to see and differentiate the emotions expressed by others around them.

OBO SMART WATER BY SUHAYLA, ZUNAIRA AND SABIKA

A rechargable smart water bottle connected to an app via bluetooth with a touch of a button. Made from sustainable materials, this water bottle indicates to the user whether they have reached their target hydration levels using an LED ring.

VITALLINK BY JOHANNA, ZITONG AND SIDDHARTH

In cardiac emergencies, delays in sending ECGs and vital signs from ambulances to hospitals can slow life-saving treatment. Our project is a software system that securely transmits real-time cardiac data directly from ambulance defibrillators to hospital systems. It standardises data outputs and removes unreliable workarounds such as photographing screens. Hospital clinicians can review ECG traces, identify serious conditions such as STEMI, and prepare specialist teams before the patient arrives. This improves patient safety, reduces errors, and makes emergency cardiac care faster and more efficient.

DESIGN & CONSTRUCTION

ATHLETES BRACE SUPPORTER BY MAGDA

The Athletes Brace Supporter addresses the issue of elite athletes being unable to train due to injury, either from pain or fear of worsening it. It is a smart brace that supports the injured joint while monitoring movement and muscle strain to prevent further damage. Using IMU and pressure sensors, it detects harmful patterns and alerts the user through vibration. Connected to a phone app, it provides real-time warnings and post-session feedback, allowing users to customise safe movement limits. Waterproof and suitable for all sports, it enables safe, continuous training during recovery.

MODULAR KEYBOARD BY SOPHIA

My project is a modular and highly customisable keyboard which will make keyboards much more customisable and accessible. It will be made up of modules, where each module is an individual key, which can connect together with magnets to create any keyboard configuration. Metal contacts on the side of each key will make sure that it is powered as soon as it is connected to the keyboard, to allow the user to change which keys they have and where those keys are easily and at any time. I also plan to add modules with sliders, dials, or joysticks to give the keyboard even more functionality, along with triangular shaped connector modules so that keys can be connected at an angle.

SPORTY LAUNDRY BASKET BY CONNOR

Sporty Laundry Basket is a fun and interactive laundry basket to encourage teenagers to put their clothes in the washing, thus preventing those constant stresses in households around the country!

TEENTECH AWARDS

EDUCATION

AUDIO BY GANIYYAH, MARA-ALEXANDRA AND OLIVIA-JANE

AUDIO is a web-based speech-to-text and translation app designed to support bilingual students in real time. It listens to spoken language through the device's microphone, instantly converts it into text, and can translate that text into another language using a custom translation server you deployed yourself. The app helps students follow lessons more easily, understand content in their preferred language, and review past transcriptions when needed. It's lightweight, accessible, and works directly in the browser without requiring any downloads or external services.

QUIETLIGHT BY AVA-MAI, BAHARA AND SHREYA

QuietLight is a device that uses the commonly known traffic light system to tackle the universal problem of all classrooms and even workspaces: noise levels. Targeted at younger children, QuietLight encourages self regulation though visual driven motivation; we propose this fun and interactive method of classroom management that aids all teachers and students, improving the learning experience for everyone.

STUDIBRAIN BY AVERY

Studibrain is an interactive board game to help students revise for their GCSE examinations. It makes studying fun, using kinaesthetic learning boosting your grades and your mental health.

BEST USE OF AI - SUPPORTED BY SSCL

AI IMAGE COMPARISON BY BORS

My project, AI Image Comparison, uses AI to analyse and compare images, identifying differences and patterns. I built a browser-based prototype, tested with friends and teachers, and have simplified technical language in response to feedback. The tool uses DeepSeek to produce plain-text explanations, making outputs accessible to non-technical users. In industry, it could integrate into existing workflows: comparing drone images to flag crop disease, tracking changes in medical scans, or inspecting manufacturing output against a reference. I also plan to add a dataset analysis module, letting businesses upload large image collections and receive in-depth insights automatically.

AI SMART RECYCLING BIN BY IONA AND AMELIA

Our AI Smart Recycling Bin is designed to help children correctly sort their waste using AI image recognition. The bin is trained to identify all types of materials such as paper, plastic, glass, metal, or food. It is child-friendly, sustainable and brightly coloured to encourage use.

ALGAE AI ALERT BY MARHARYTA, STENY AND CHRISTINA

Saving Poole Harbour starts with seeing environmental threats before they happen. Our project combines artificial intelligence, environmental science, and satellite technology to predict eutrophication before harmful algal blooms and oxygen-depleted "dead zones" develop. Using a Random Forest machine learning model trained on nutrient levels, weather patterns, sewage data, and satellite imagery, we classify eutrophication risk with 79% accuracy. By transforming complex environmental data into an early-warning system, we aim to help regulators, farmers, and conservationists protect one of Europe's most important natural harbours and its rich biodiversity.

BLERTLY BY DHRISHIV, ESHWARA AND ABHIRAM

Blertly is an AI-powered learning platform designed to make studying more engaging, personalised, and effective. Acting like a student's own teacher, it adapts to their strengths and weaknesses, provides tailored explanations, generates practice questions, and gives instant feedback. Unlike traditional revision tools, Blertly combines AI lessons, active recall, exam practice, progress tracking, and interactive study methods in one place. The platform aims to make high-quality education accessible to students everywhere, helping

them learn more efficiently and preparing them for the future of education through intelligent, adaptive technology.

PATHWISE BY NICOLA, MOFEORE AND UGONNA

Pathwise is an AI-powered academic and career guidance platform built for high school students who are working towards competitive university applications. It addresses a core problem in education: most students, particularly those without access to expensive private counsellors, have no structured way to discover opportunities, manage deadlines, or strategically build their profile for prestigious universities. Pathwise brings all of that into a single, easy-to-use platform.

PROMPTACARE BY NAHOM

PromptaCare is an AI-powered medication reminder platform designed to support carers and elderly people, particularly those living with memory difficulties. The system uses automated voice calls to remind patients when to take their medication, records their responses, and alerts carers if medication is missed. Inspired by the challenges faced by a close relative with early-onset dementia, PromptaCare aims to improve medication adherence, reduce stress for families and carers, and help elderly people maintain independence. The project also includes multilingual support and dementia-friendly reminders tailored to individual patient needs.

ETHICAL INNOVATION

ALARMED MEDICATION BOX BY KEZIA

My project is an alarmed medication box, that serves its purpose as a fridge magnet. The product is designed to help those who struggle with remembering tasks like taking medication. Especially for the elderly or disabled. It works by attaching to a fridge and beeping when it's registered for a certain time/ date. The medication box will dispense once a registered fingerprint is recognized (This helps prevent children interfering with it.) I've included certain features like an app, to help set things like reminders and safety features. I've built this project based on my own personal experiences with remembering medication.

ALERTREE BY OLHA

AlerTree is a low-cost wildfire detection system designed to provide early warning in areas that lack access to expensive monitoring technology. The device straps to a tree and uses smoke, temperature and humidity sensors to detect fire risks. When danger is detected, it automatically sends an SMS alert, enabling a faster emergency response. Designed to be affordable and accessible, AlerTree costs around £40 and uses a 3D-printed enclosure, with open-source design files. A simple green, yellow and red LED system provides a clear indication of fire risk, helping protect communities, homes and natural environments.

BIO-HAVEN LIVING BY JONATHON AND AIMEE

BIO-HAVEN Living provides Social Housing at a relatively low cost, focusing on design, architectural elements and implementing as many sustainable solutions as possible. It also focuses on new/Smart materials and modern technology. The problem being solved is the United Kingdom housing crisis and the cost of living. The solution is to provide affordable apartments to help people and areas for business to grow local economies. This will use local material, energy efficient designs and include accessible greenspace. Environmentally friendly designs are incorporated with wind turbines, solar panels and green-roofs. The project focuses on designs that make a building look and feel desirable.

THE MM CAFÉ BY HALIMA

A socially sustainable, mental-health focussed café that helps young people and adults to Refresh (letter-writing), Relate (connecting with community) and Revitalise (reapproach issues with a new perspective). My USP is that there will be a transfer of physical letters, creating long-lasting connections in the community.

PROJECT GERIATRIC BY THOMAS, DANNY AND SIMON

We have created a device that talks to the elderly to help with the issue of elderly loneliness. Our idea involves a small, handheld device with an AI assistant on board, preprogrammed to accompany the elderly person. It will also help them in their daily life by including a calendar to remind them when to take medication. You will be able to change the voice that will be output. From our research, we found that up to 35% of people above the age of 65 have experienced loneliness in recent memory, and all of us have at least one grandparent who is living alone and doesn't have many people to talk to regularly, despite often needing help with things such as remembering events.

PURE PASTURE BY HARRIET AND RUBY

We have developed a methane-capture system to reduce agricultural greenhouse gas emissions. Our design uses copper-treated zeolite, a low-cost, widely available material, to absorb methane produced by cattle farming. The zeolite is housed in durable steel panels fitted to cattle fences and shed roofs, with a vapour-permeable membrane allowing methane to enter efficiently. A honeycomb structure maximises adsorption capacity, while annual maintenance ensures performance. Once saturated, the zeolite is regenerated by heating to release the methane, which can then be used as biogas, creating a sustainable closed-loop energy system.

A SHOE-IN BY NAYA

"A Shoe-In" is a sustainable, philanthropic project which involves the production and manufacture of children's shoes. It uses uppers made of reclaimed leather and eco-conscious TPR soles with blended recycled content, to ensure the shoes are environmentally-responsible as well as comfortable. The shoes are then donated to a charity, supporting underprivileged children in India. The stakeholders involved in this project are: Mayoral; Apollo Fashion; RKComponents and Harmony House. The aim of "A Shoe-In" is to provide an ethical, environmentally-friendly way to allow young, impoverished children to experience proper care and support, through their footwear.

TEACHER OF THE YEAR

TeenTech appreciate that behind every student project entered for the TeenTech Awards lies the dedication, time and organisational skills of a teacher, technician, librarian or assistant who has taken on the considerable extra work and planning that participation involves. There will be an individual award for a teacher who we believe has shown exceptional imagination and dedication to help their students.

This year's finalists are:

Amelia Jane Piper - MajorTim.space Young Ambassador Programme

Lauren Poultney - The Roundhill Academy

Amanda Jones - Beaumont School

Beverly Maloney - Royal Hospital School

YOUNG INNOVATOR OF THE YEAR – THE PEOPLE'S CHOICE

Every finalist has been asked to vote for a team other than their own.

THANK YOUS

Along with our sponsors we would like to thank the following, who have volunteered their time and talent to make the TeenTech Awards a very special day:

- Andy Quested for leading the A/V team
- Leigh Emmerson (Persistence Of Vision) for filming
- Veronica Thorne for stage managing the ceremony
- Channing School and Loreto School for providing student volunteers on the day.
- Commvault and Benchling for providing volunteers on the day

Over 300 companies and 40 Universities are now working with TeenTech but we would like to especially thank the following who have provided exceptional support for student projects:

AMDEA
ARUP
AWS
Benchling
C9 Recruitment
Chaos Created Media
Commvault
Department for Science, Innovation and Technology
Dropbox
Haleon
Hoare Lea
IBM
Institute of Cancer Research
IntelliLogix
Kantar
MIRA Institute of Technology
NHS
NHS Shared Business Services
Oracle
The Lancashire Teaching Hospitals
Softwire
Sopra Steria
SSCL
The Worshipful Company of Fuellers
UK National Nuclear Laboratory
Which? Magazine
Wincanton

Universities supporting student projects for the TeenTech Awards:

Advanced Manufacturing & Engineering, University of Coventry
Birmingham City University
De Montfort University
Manchester Metropolitan University
The University of Bath
The University of Cardiff
The University of Lancashire
The University of Exeter
The University of Manchester
The University of Nottingham – Faculty of Engineering
The University of Oxford
The University of Leicester
The University of London, Queen Mary's College
The University of Portsmouth
The University of Roehampton
The University of Teeside
The University of Wales
The University of Warwick
Stanford University

And of course, thank you, for making the TeenTech Awards so very memorable.
We look forward to seeing you again in 2027.


WE ARE
CREATIN
THE FUTURE






TEENTECH
Ask me about
my TeenTech
journey













