OCTOBER 2025

ROBOPALOOZA 2025
WESTERN AUSTRALIA

THE ULTIMATE ROBOTIC FESTIVAL FOR INDUSTRY AND THE NEXT GENERATION

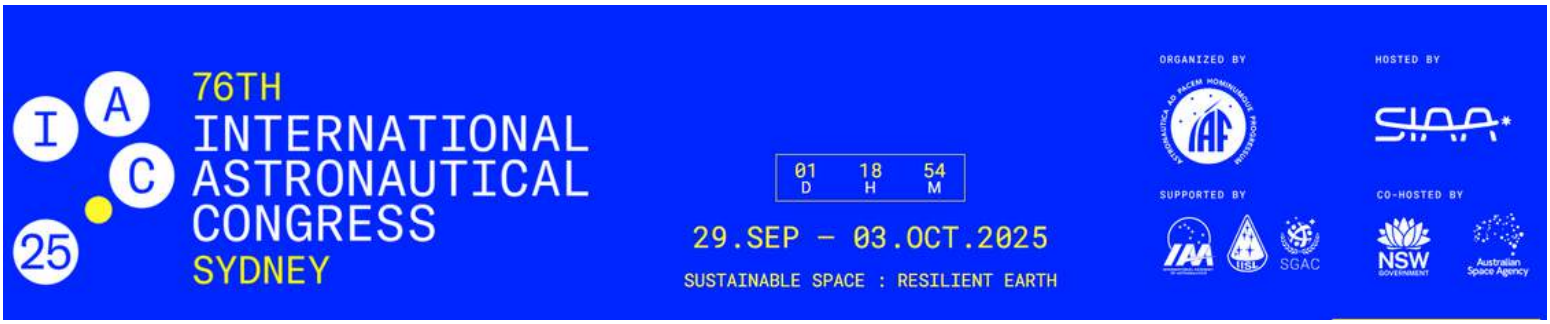
5-6 OCTOBER 2025

ABOUT ROBOPALOOZA WESTERN AUSTRALIA 2025

Robopalooza 2025 is a vibrant, multi-day event blending an advanced space robotics competition sponsored by the IEEE, STEM education, industry engagement, and cultural festivities. Participants simulate remotely driving a rover on the Moon, showcasing cutting-edge robotics and innovation. Brought to Perth and hosted by Mining and Space Pty Ltd in collaboration with the IEEE, the world's largest technical professional organisation, the event highlights Western Australia's leadership in robotics, automation, and technology. On October 5-6, 2025 at the Australian Automation and Robotics Precinct, Robopalooza will inspire the next generation of engineers and scientists, attract global visitors post-IAC, and strengthen WA's position as a hub for innovation and industry collaboration.

Western Australia: through the support of the WA Government an Edith Cowan University are proudly sponsoring Robopalooza 2025, enabling this world-class event to take place in Perth. Thanks also to the Australian Automation and Robotics Precinct (AARP) for their kind contribution of the event land. Their commitment highlights WA's strategic forestight in robotics, automation, and innovation, positioning the State as a global hub for emerging technologies. Located within the AARP, Robopalooza will leverage state-of-the-art facilities to deliver an advanced IEEE space robotics competition, STEM engagement, industry showcases, live music, food trucks and cultural activities.

As an Interantional Astronautical Congress (IAC) - adjacent event, Robopalooza amplifies WA's international visibility, attracting global visitors and demonstrating the State's capabilities across mutiple sectors. The support from the WA Government, Edith Cowan Univeristy and the AARP ensures participants and attendees experience the full breadth of WA's expertise, infrastructure, and innovation ecosystem, further strengthening collaboration between Western Australia, global industry, and international partners, including alignment with US missions and initiatives in space and technology.



The International Astronautical Congress (IAC) is a prestigious event where the world's space community gathers to access the latest advancements and trends, industry connections and partnerships. It is considered the world's most prominent and prestigious global space event, the International Astronautical Federation (IAF) organizes the annual event.

IAC 2025 in Sydney, Australia is hosted by Space Industry Association of Australia (SIAA) and co-hosted by Australian Space Agency and NSW Government. Mining and Space pty ltd is proud to have worked with the SIAA to acheive the recognition by the IAF for robopalooza 2025 to be listed as an IAC adjacent event.

IAC will broaden the influence and relevance of space to adjacent industries, including resources, and will delve into why space is critical for both businesses and our everyday lives.

Robopalooza aims to attract global visitors from IAC to Western Australia, to inspire the next generation of engineers and scientists, while showcasing Western Australia's leadership across industries in robotics, automation and innovation. By bringing space industry professionals to Western Australia, this becomes the largest global stage for physical technology demonstrations to occur between space and resources.

The Department of Energy and Economic Diversification (DEED) was established to support Western Australia's energy transition and economic diversification. DEED is responsible for the State's transformation to a renewable energy future, trade and investment attraction, activation of industrial land, industry development and advanced manufacturing, leveraging our innovation and science capability, and economic diversification. This includes administration of Western Australia's system of State Agreements, major resources developments, the network of Invest and Trade WA offices, energy planning and regulation, and the Powering WA initiative. with this focus, driven by the alignment to showcase opportunities across multiple sectors, Mining and Space pty ltd is proud to have the support of DEED as a principal sponsor at Robopalooza 2025.

Western Australia has firmly established itself as a global mining powerhouse, driving the state's economy and providing unprecedented employment opportunities. The state's unique geological advantages, combined with favorable government policies and sustained industry investment, have created an environment where the resources sector continues to break records and set new benchmarks.

Western Australia's dominance in the global mining landscape stems from its extraordinary mineral wealth, sophisticated mining infrastructure, and strategic government support. The state possesses world-class deposits of iron ore in the Pilbara region, gold in the Goldfields, and increasingly important critical minerals for energy like lithium and rare earth elements scattered throughout its vast territory. "Western Australia's unique geological advantages position us at the forefront of global mineral production," explains Professor Ross Large from the Centre for Ore Deposit and Earth Sciences. The ancient Yilgarn Craton, forming much of the state's southwest, contains rock formations dating back 2.7 billion years, creating ideal conditions for gold mineralization."

Western Australia has developed a mining sector that not only dominates Australia's resource production but stands as a global leader across multiple commodities. Today, space plays an equally important role.

Western Australia is involved in a diverse range of space activities – providing critical support for international space agencies and commercial space missions, building the world's largest radio telescope and transferring our world-leading remote operations technologies from the resources sector to space missions.

Western Australia is also at the forefront of technology transfer between space and terrestrial sectors to improve productivity, safety and socioeconomic outcomes for our economy and community. Our State's space industry is underpinned by a highly skilled workforce, a world-class space science ecosystem, a thriving community of space STEM outreach groups and supported by innovation hubs and common use infrastructure.

EVENT LEAD TEAM

MICHELLE KEEGAN

Lead partner and co-architect of Robopalooza 2025 as Founder & Director of **Mining & Space Pty Ltd.** Global thought leader at the intersection of the mining and space industries and Corporate Advisor at Atrico, leading the Mining-Space vertical.

NATHAN KIRCHNER

Key organiser of Robopalooza WA 2025 & **Innovation Ventures**, Investment, Robotics, AI, Deep Tech widely accomplished expert with a substantial track record of impactfully apply this to heavy industries.

ROB MUELLER

Founder and co-architect of Robopalooza. National Aeronautics & Space Administration (NASA) Space Systems Engineer working on Space Mission Architectures and technology development for space missions to other planetary bodies. Specializing in Robotics for off-world excavation, construction and In-Situ Resource Utilization (ISRU). Supporting Roboplaooza as an IEEE volunteer.

DAVE MAGNONI

Institute of Electrical and Electronics Engineers (IEEE), Program Director, Future Directions, IEEE Technical Activities. Accomplished leader with broad experience in Product Management, Strategy, Product Marketing, Business Development and Operations. Strong and consistent record of delivering results.

STEM DAY LEADS

JADE SINGLETON

Connecting, Coaching, & Caring in a Diverse Mining World. Experienced mining engineer spanning consulting and operations across the industry. Chair of "**Get Into Resources**".

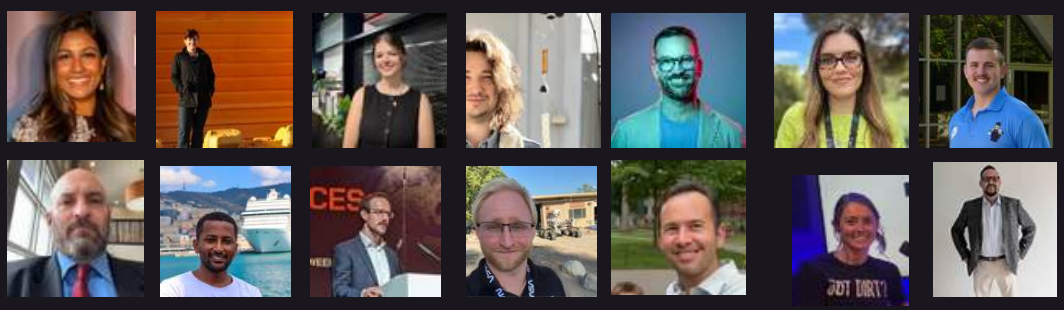
CHEE WONG

Chee loves living in Perth with his family but he's nervous about the problems the next generation (including his three children) will inherit. He is on the mission to help the next generation and he does this each day at **Young Engineers Australia**

WORKING GROUP

This event was only possible thanks to the incredible contribution of a global group of some truly wonderful people. It simply would not have happened without their energy, vision, and commitment. A huge thanks to the following for making it real.

Erik Franks
Anna Metke
Yonas Teodros Tefera
Jared Long-Fox
Christian Andersen
Jonathan Slavik
Anna Bruchez-Walker
Bradley Dixon
Cameron Stevens
Daizee Wiles
Esmarie Iannucci
Finn Manning
Chris Lane
Renu Kannu



KEY NOTE SPEAKERS

Minister for Regional Development; Ports; Science and Innovation; Medical Research and Minister for the Kimberley.
Following the 2025 election, Stephen has been appointed as the Minister for Regional Development; Ports; Science and Innovation, Medical Research and Minister for the Kimberley.

NASA Space Systems Engineer & IEEE voluteeer, working on Space Mission Architectures & technology development for space missions to other planetary bodies. Specializing in Robotics for off-world excavation and construction and In-Situ Resource Utilization (ISRU). Principal Investigator for "Game Changing" technologies. Surfer, Sailor, Skier, Explorer, Adventurer and Innovator.

Paulo has served at the forefront of some of the biggest challenges and megatrends of our time to deliver real-world impact. he has enriched the findings of NASA's Mars Exploration and now leads engineering at ECU. he bridges the worlds of academia and industry to disrupt and transform what STEM means to our future scientists, leaders and society.

Renu is responsible for fostering a thriving business community across the broader automation and robotics ecosystem. With more than 7 years experience in project management and strategic partnerships, she understands the power of connection and collaboration in building a world class industry driven facility.

Michael "Orbit" Nayak is a science-fiction author, and a Program Manager with the **Defense Advanced Research Projects Agency (DARPA)**. At DARPA, he starts and runs programs in atmospheric science, astronomy, cislunar and lunar technology, high-energy physics, parachute technology, radio science and more.

Linda Dawson is a senior executive with more than 25 years' experience working in large Australian and multinational organisations across the resources and utilities sectors. She is the Head of the Office of Defence Industries in the Department of Premier and Cabinet, previously the Deputy Director General Industry Science Innovation, WA Government.

Colleen Altstock most recently served as the Economic and Political Section Chief at the U.S.Consulate General in Shanghai. At the State Department in Washington, DC, she was Chief of the Global Affairs Unit in the Office of Chinese Affairs, Chief of the Multilateral Affairs Unit in the Office of Global Issues in the Bureau of Intelligence and Research, and Chief of the Political Unit in the Office of Russian Affairs.

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MAJOR SPONSOR

EDITH COWAN UNIVERSITY

> *This festival offers students a vivid and immersive experience in operating robotic explorers and conducting scientific experiments*

ECU EXECUTIVE DEAN, SCHOOL OF ENGINEERING, PROFESSOR PAULO DE SOUZA

Edith Cowan University (ECU) is proud to step into the future as the main partner of Robopalooza 2025. offering students and the broader community an unprecedented opportunity to engage with the technologies shaping tomorrow.

“We are thrilled to partner with Robopalooza 2025, an event that brings together some of the brightest minds in robotics and telepresence from around the world. This collaboration, especially with the involvement of NASA, represents an extraordinary opportunity for our students to engage directly with cutting-edge innovation and global leaders in the field.”

Professor de Souza said. “It’s not just about showcasing technology; it’s about inspiring the next generation of engineers, creators, and problem-solvers. At ECU, we believe in learning through experience, and initiatives like this are where education meets real-world impact.”

PREMIER SPONSOR

CATERPILLAR

"As technology advances, Caterpillar will focus on developing more autonomous and robotic solutions to enhance efficiency and safety in the industries in which we work."

Caterpillar Inc. is the world's leading manufacturer of construction and mining equipment, off-highway diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives.

For 100 years, we've been helping customers build a better, more sustainable world and are committed and contributing to a reduced-carbon future.

Our innovative products and services, backed by our global dealer network, provide exceptional value that helps customers succeed.

Caterpillar does business on every continent, principally operating through three primary segments – Construction Industries, Resource Industries and Energy & Transportation – and providing financing and related services through our Financial Products segment.

EVENT PARTNER

MINING AND SPACE PTY LTD

Founded by Michelle Keegan, **Mining & Space**, the event partner and co-architect of Robopalooza 2025. Here the mission is to ignite a movement that transcends industries and generations. Robopalooza is only the beginning.

By bringing the mining and space industries together at one table, we are showing the world the power of collaboration across sectors that for some they thought were never meant to meet — and yet, when they do, they create breakthroughs that matter for Earth and beyond.

We aim to build a lasting community that continues to collaborate after the event — not as separate industries, but as one ecosystem of thinkers, doers, and dreamers.

We want our city to see the value we've created and champion it as part of its identity. We want kids to be inspired, to feel they are part of something bigger, and to believe they can shape the future. We want industries to recognize that working together isn't just possible, it's profitable, sustainable, and transformative.

At the heart of it, our mission is about creating a better Earth through technology, collaboration, and human ingenuity. By connecting people in new ways and inspiring the next generation, we are planting the seeds of a future where mining and space technologies together advance human progress.

PARTNER

NASA AMES RESEARCH CENTER

NASA needs the capability to build large-scale solar power, communications, and habitat systems on other planets to support future deep space exploration. The ability to autonomously assemble these types of structures in space instead of sending large pre-assembled hardware from Earth is critical to sustainable future exploration of Moon, the Red planet, and beyond.

The Automated Reconfigurable Mission Adaptive Digital Assembly Systems (ARMADAS) is developing software and hardware that will be able to autonomously assemble materials to make a variety of functional structures such as habitat structures, large antennae arrays, and even a spaceport.

At Robopalooza 2025, the NASA Ames team will be educating students in what this means for habitats on other planets and providing insight into what this could mean for industries like mining on earth!

Proudly brought to Robopalooza 2025, thanks to the support of Edith Cowan University

PISCES

The Pacific International Space Center for Exploration Systems (PISCES) is an aerospace research and education program at the University of Hawai'i at Hilo's College of Natural and Health Sciences. Founded in 2007, we develop innovative and sustainable technologies for Earth and space while supporting student education through hands-on research and STEM career programs.

It is with thanks to the PISCES team, the Helelani Rover will take centre stage for all IEEE Telepresence Competitors as the robot for the competition.

Proudly brought to Robopalooza 2025, thanks to the support of Edith Cowan University

PARTNER

AUSTRALIAN AUTOMATION AND ROBOTICS PRECINCT

The Australian Automation and Robotics Precinct (AARP) is a world-leading collaborative innovation hub and Australia's largest test and development site supporting the advancement of automation, robotics, remote operations and zero emissions technologies globally.

The state-of-the-art precinct provides startups, small to medium enterprises and large corporates access for testing, research, development and training in real-world conditions, without the obstacles of accessing a production environment.

INDO-PACIFIC ROBOTICS, AUTONOMY, AI AND CYBER CONFERENCE

Following the same format of the Indo Pacific Space and Earth Conference (IPSEC), the conference is aimed at bringing together leading minds, thought leaders and industry experts from around the globe for opportunities in robotics, autonomy, AI and cyber. Through interactive sessions, workshops and discussions, the conference provides a unique platform for attendees to explore the infinite possibilities of robotics and related technologies and their impact around the world, forging collaborations that will drive innovation in various sectors.

PARTNER

IEEE TELEPRESENCE

IEEE Telepresence is an Institute of Electrical & Electronics Engineers (IEEE) Future Directions initiative launched in 2021 with a focus on advanced telepresence technology that would enable a user's remote presence at a different physical location: a) feeling as if being there, and b) having a similar effect as if being there – in appearance to others and in effectual action, via telerobotics.

IEEE Telepresence is creating a community for projects, events and activities on telepresence technologies - covering topics such as teleoperations - operating/manipulation equipment as if present in cabin/control room; Moving heavy equipment, driving agricultural machines, perform tele-medicine.

Fields of Interest: Accelerate the missing technology components and encourage integrated telepresence systems. Create new interfaces for teleoperations. Create Community, Roadmap, & Standards.

T-ZERO.MEDIA

T-Zero.Media is the official creative and. digital engine behind Robopalooza.space. We lead all online marketing, media production, and digital storytelling for the festival—building excitement, growing community, and showcasing the cutting edge of robotics innovation. From bold visuals and dynamic videos to social campaigns and livestream coverage, T-Zero. Media connects Robopalooza with a global audience and ensures the festival's energy is felt worldwide.

TECHNOLOGY PARTNERS

ZABIDOU

Zabidou's ultra-vision for Physical AI enables real-time material recognition. Already proven in recycling and food production, our imaging and laser-sensing systems now offer mining a practical path to efficiency. By delivering accurate, immediate material data, Zabidou enhances decision-making, optimises resources, and maintains quality.

Our low-OpEx laser-sensing module uses optical analysis and edge computing to measure composition and density. Seamlessly integrated with conveyors and processing equipment, it provides instant insights to adjust for ore quality, recover more value, and boost productivity.

We are seeking mining partners to trial instantaneous material classification. Early engagement lets us understand your needs, demonstrate capability, and explore integration to improve efficiency, recovery, and performance.

CONTACT: estur2204@zabidou.com

AUGMENT TECHNOLOGIES

Augment Technologies specialises in enabling increased automation of processes before and after blasting.

Using a custom physics engine to model the outcomes, increased insights are now in the hands of personnel right across the value chain, to drive improved recovery of ore on the bench and at the mill. They're doing this right across the mining industry, in Australia and globally. They recognise that by augmenting the geologists, engineers and operators with knowledge they didn't have previously, they can more accurately mine what they had planned, achieve minimal dilution and maximum value at the mill.

They're already working with a number of global partners to minimise ore loss and dilution for miners around the world.

FUGRO SPAARC

The Space Automation AI and Robotics Control Complex (SpAARC) is a world-class facility located in Perth, that trains, tests and controls remote and autonomous operations in space and other harsh environments, and a world-recognised commercial facility for innovation, security and collaboration.

SpAARC was financially supported by Fugro, the Australian Space Agency and the Western Australian Government, providing infrastructure for translating current Australian robotic expertise into the space environment. In addition to subsea and terrestrial activities, it supports software simulation of space vehicles, space robotic systems and planetary exploration systems. Today they also use this in collaboration with Intuitive Machines to support flight missions to the Moon!

"We've been on a mission for a number of years to translate our strength in robotics, automation and mission operations across sectors. Supporting deep sea missions everyday, the first commercial lunar landing in over 40 years and much more, we are steeped in deep and translatable expertise. For us, Robopalooza enables us to showcase our capabilities across industries and help create new opportunities!" Director, Fugro SpAARC, Samuel Forbes

TECHNOLOGY PARTNERS

FREELANCER

Freelancer is fast becoming a key player in space - helping find solutions to some of the most significant challenges in space exploration. That's primarily through Freelancer's work with NASA. For 10 years, the space agency has been using the power of the world's largest freelancing and crowdsourcing platform to find new ways to protect astronauts, give them new tools to carry out their missions, and make their travel beyond the Earth more efficient.

It's not just NASA that recognises the potential of the thirteen-time Webby Award-winning company and its more than 80 million users. The National Institutes of Health and other governmental agencies have carried out major projects with Freelancer - some of which brought about advances in environmental protection, energy innovation and public safety. Freelancer recently hosted the NASA Space ROS Sim Summer Sprint - a global challenge to develop mission-ready robotic systems for space.

PURALINK

Puralink's autonomous robots inspect, map, and repair pipes with minimal manual input. Using CCTV, 3D LiDAR, and digital twin data, they detect faults faster and cover longer distances, including vertical shafts and sharp bends. This modernises pipe inspections, making them safer and more efficient.

In mining, our robots inspect water, slurry, and ventilation pipelines in hard-to-reach areas, reducing downtime and risk while delivering precise insights.

We seek mining partners to trial our robots in live environments, proving ROI through improved safety, earlier fault detection, and reduced downtime—capabilities that can also extend to future space infrastructure.

CONTACT: shyeon@puralink.com.au

SPACE RESOURCE TECHNOLOGIES

SRT is the world's leading producer of high-fidelity regolith simulants—precision-engineered materials that replicate the surfaces of the Moon, Mars, and asteroids. For over a decade, their simulants have powered innovation in space hardware engineering, provided ISRU researchers with reliable data, and inspired new generations of problem-solvers.

"We've delivered over 250 tonnes of simulant to more than 50 countries, supporting space development across the globe. Our mission: helping humanity on its journey to become a multi-planetary species. Supporting events like Robopalooza is a core part of how SRT enables innovation—sparking creativity in tackling the complex challenges we will face in space. With collaborations spanning space agencies worldwide and leading commercial partners, SRT is committed to investing in the space community, advancing breakthrough technology through competition, and inspiring the next generation through hands-on learning." Anna Metke, CEO

TECHNOLOGY PARTNERS

PULISPACE

Puli Space Technologies Ltd. is a space technology company based in Budapest, Hungary. It was founded in 2010 with the aim to become part of the fast growing private lunar industry. Puli Space Technologies develops a low cost, lightweight, planetary rover platform with unique mobility capabilities carrying payloads, as well as a neutron spectrometer instrument to explore lunar water resources, and support In-Situ Resource Utilisation (ISRU) activities, while able to survive the harsh environment on the Moon.

There are multiple missions, to reach the moon, to demonstrate technology on the moon, to search for water ice, to measure radiation, to explore the lunar surface and to acquire data from the moon.

ASTROPORT

Astroport Space Technologies, Inc. was founded in 2020 as a technology venture arm and a subsidiary of Exploration Architecture Corporation. Astroport is developing patent-pending regolith solidification technologies for lunar infrastructure construction using 3D printing and autonomous robotics, with an initial focus on lunar landing pad emplacements.

INTELLIGENT ROBOTICS

Intelligent Robotics develops real-world robotic systems for mining, manufacturing, and defense, with expertise in AI, 3D sensing, and automation. Our proven track record includes robotic conveyor idler changers and autonomous haul truck refueling. Recently, we were selected for the BHP TAD Deep Mining Challenge to advance autonomous robotic maintenance.

We are building systems for Zero-Entry Mining, reducing human presence in active zones to improve safety, productivity, and access to deeper ore deposits. This lowers accident risk, cuts costs, and makes new sites viable.

We seek mining OEMs and contractors to partner on robotics, sensing, and automation for hazardous environments—enabling remote, autonomous operations and advancing the future of deep mining.

CONTACT: tkrogh@intelligentrobotics.com.au

TECHNOLOGY PARTNERS

CHIRONIX

Founded in 2017 by a team of military veterans and robotics pioneers, we began by tackling complex challenges in defence, where we developed technology to safely extract wounded personnel from combat environments.

Since then, we've expanded our work into industries like mining, oil and gas and utilities – supporting our customers with land based remote robotic inspection solutions, robot teammates which move goods and logistics items, and competent mobility platforms.

Whether it's monitoring equipment in hazardous areas or coordinating critical responses, our goal is to amplify human potential and solve real-world problems.

SILICON VANDAL

Silicon Vandals is an R&D and Invention Studio that tackles overlooked problems through rapid experimentation and rigorous testing. Managing risk with a portfolio approach, we develop speculative ideas into viable products.

We support every stage of development—mock-ups to test ideas, proofs of concept for feasibility, MVPs to assess user value, and pilot trials to validate business models.

We seek partnerships with founders and innovators needing help to design, test, and launch products. Our mission is to reshape the startup landscape by pursuing high-reward projects with a strategic, distributed risk model.

CONTACT: https://siliconvandals.com/

HINDSITE INDUSTRIES

HINDSITE is a digital work platform that transforms tribal knowledge into guided, step-by-step instructions for frontline teams. With real-time support and microlearning, we ensure complex tasks are done right the first time, reducing downtime, costs, and safety incidents while boosting compliance. Customers like Boeing and Michelin have seen strong ROI.

For space and mining, HINDSITE standardizes workflows, captures compliance evidence, and supports teams in remote environments. This consistency enhances safety, reliability, and productivity in critical operations.

We seek partners in space and mining to trial our platform, demonstrating measurable gains in safety, efficiency, and operational performance.

CONTACT: eva@hindsiteind.com

TECHNOLOGY PRESENTATIONS

Kelly Randell representing Astrolab, talking about their “Flex” and “Flip” rovers and their upcoming lunar landing.

Todd Peate while many miles away from space, onstage talking to Jevons Robotics platform used on mining benches every day, designed very similarly to the robots being developed at Astrolab.

Zac Pullen is the CTO at Greenroom Robotics and talks to a new dimension at sea, where they automate some of the most complex platforms.

Trisha Epp is representing Freelancer.com where they deliver open innovation for NASA, ensuring a live pipeline of new technologies into NASA missions.

Pablo Sobron from Impossible Sensing has worked on multiple sensors used across many space missions and will challenge us on how that can be applied in mining.

STEM PARTNERS

YOUNG ENGINEERS AUSTRALIA

Young Engineers is a hands-on STEM education provider that inspires children across Australia to think like creators, engineers, and problem solvers.

Using LEGO®, robotics, electronics, and creative building programmes. They deliver engaging workshops, camps and after-school clubs tailored for various age groups, from early learners through to teens.

Since 2008, Young Engineers has expanded to operate in dozens of locations, running hundreds of classes per day and touching the lives of tens of thousands of children. Their curriculum aligned programs help build confidence, curiosity and real-world skills in teamwork, problem solving, design thinking and technical ability, equipping the next generation not just to imagine, but to build.

STEM PUNKS

STEM Punks fosters innovation by bridging the gap between schools and industry to prepare students for future workforce demands.

They design and deliver STEM programmes that are deeply aligned with real world challenges, such as autonomous systems, sustainability, environmental science, and other emerging fields, giving students exposure to cutting edge problems and thinking.

In doing so, STEM Punks also supports teachers, develops resources, and partners with industry to amplify impact. Their work helps build ecosystems of STEM education that are inclusive, forward looking, and grounded in practical application. Awards and recognition from education and innovation bodies highlight their role in shaping not just skills, but also mindset and community connection.

STEM PARTNERS

CURTIN UNIVERSITY

Curtin University in their robotics club focuses on practical learning, giving projects that assist in the broadening of knowledge, as well as consolidating theoretical information gained during degrees.

UNIVERSITY OF WESTERN AUSTRALIA (UWA)

UWA is a central hub for Robotics and Automation, in research, teaching and industry relations. The university is home to some of the finest robotics labs in the country and has established Australia's first engineering degree program in Automation and Robotics.

VEX

VEX Robotics is educational robotics for everyone. VEX solutions span all levels of both formal and informal education with accessible, scalable, and affordable solutions.

NEGENTROPIC

An AI driven platform that transforms real world scans into rapidly deployable VR environments. From stratospheric airships and satellites capturing forests to VR acceptance flights and immersive walk-arounds of the F/A-18 Super Hornet, they are showing how VR can move from entertainment into serious applications.

MICHAEL KUZMA

While it may rankle traditional street performers, Kuzma has used his invention for hands-off busking. And because his invention is technically a robot, it can of course do things no human can do.

STEM ACTIVITES

STEM Organisations	What is it!
Edith Cowan University: IGNIS	Learn about the globally connected IGNIS mission, set up to prevent bushfires
Edith Cowan University Robotics	Come learn about robotics built by the students at ECU
PISCES: University of Hawai'i	Connecting indigenous outreach from Hawaii
NASA Ames Research Center	Learn about robotic construction on the moon through ARMADAS
Young Engineers Australia	Learning about robotics with LEGO
STEM Punks	Learn about how to build robotics
Caterpillar	Learn about remote operation of large surface mining equipment
Byrnecut	Learn about remote operation of large underground equipment
Curtin University Binar	Learn about the Binar cubesat program, WA's first satellite launch
Curtin University Robotics	Come learn about robotics built by the students at Curtin
Curtin FIRST	Learn about building robotics for 13-18 years old
UWA Robotics	Come learn about robotics built by the students at UWA
Negentropic	Enabling the experience of living in space in virtual reality
Space Resource Tech	Learn about lunar regolith and grow your own plant
VEX Robotics	Learn about how to code robotics
BHP	Learn about the worlds leading remote operating centre

STEM AMBASSADORS

Jethro Richards is a second-year mechatronics student at Edith Cowan University (ECU) and the President of the ECU Robotics club.

"I believe engineering is such a diverse and interesting field, where you can truly become an expert in so many unique topics. My passion comes from wanting to design and create anything I can think of while fully understanding each component and optimise its functionality. I aspire to have a positive impact on the world to help as many people as possible. I can't wait to see what Robopalooza contains but I'm sure it will have so many amazing demonstrations with wonderful people working on them, promoting knowledge and connections", Jethro Richards.

Alaxandrea Grace is an Environmental Engineering student at The University of Western Australia, a proud Jirrbal woman who is passionate about innovation and the engagement of young people across academia and industry. Exhibiting a keen interest in the intersect between the mining and space industries and the multi tier impact this intersect has on society and technology innovation as a whole.

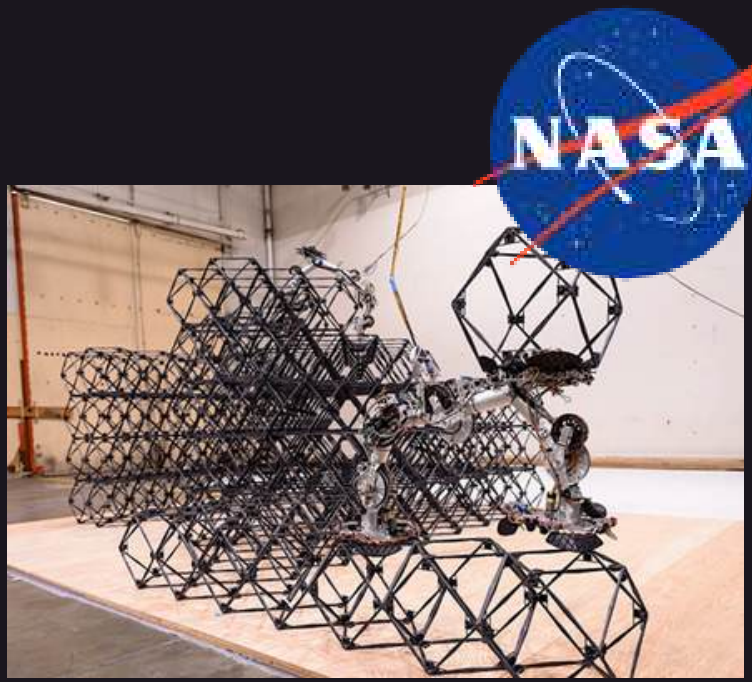
At Robpalooza, Alaxandrea has created the concept pitch opportunity for University and TAFE students. With a focus to inspire the next generation into creating startups and being a part of the robotics and AI industry, she is also an inspiration to us in standing this up!

Anay Ashwin is one of Australia's youngest space researchers, deeply passionate about human spaceflight and planetary exploration. He is focused on addressing the engineering and medical challenges astronauts will face on future Moon and Mars missions.

While still in high school, Anay is undertaking undergraduate space science through the head start program at the University of Southern Queensland. He has presented his research at major international conferences, including the International Astronautical Congress (IAC24) in Milan and the International Conference on Environmental Systems (ICES25) in Prague, and will present again at IAC25 in Sydney

INDUSTRY DEMONSTRATIONS

> *Bringing to life robotics and sensing capabilties from Earth to space... inspiring future collaboration across the space and mining industries*



INDUSTRY DEMONSTRATIONS

BYRNECUT

Bringing to life underground remote operations

IMDEX

See the leading edge downhole sensing with BLASTDOG

CHIRONIX

Pilot OS and Red Dog autonomous inspection robots

NEXXIS

Showcasing the magneto climbing robot

PULISPACE

Autonomous terrestrial rover prototype

SPACE RESOURCE TECHNOLOGIES

Regolith simulants, replicating Moon and Mars dust used by space agencies to test their space hardware

UWA

Showcasing student lead robotics

AUGMENT TECHNOLOGIES

3D blast movement solution powered by artificial intelligence (AI) and a physics engine

UNCHARTED AI

Legged robots, showcasing autonomous navigation, multi-sensor fusion, and real-time 3D mapping.

ASTROPORT

Showcasing lunar road construction robots

CITECH

Nexus 20 - a rapidly deployable communications tower

CISLUNE

Utilising the RASSOR rover to showcase robotics capability

CURTIN UNIVERSITY

Showcasing robotics and satellite technology

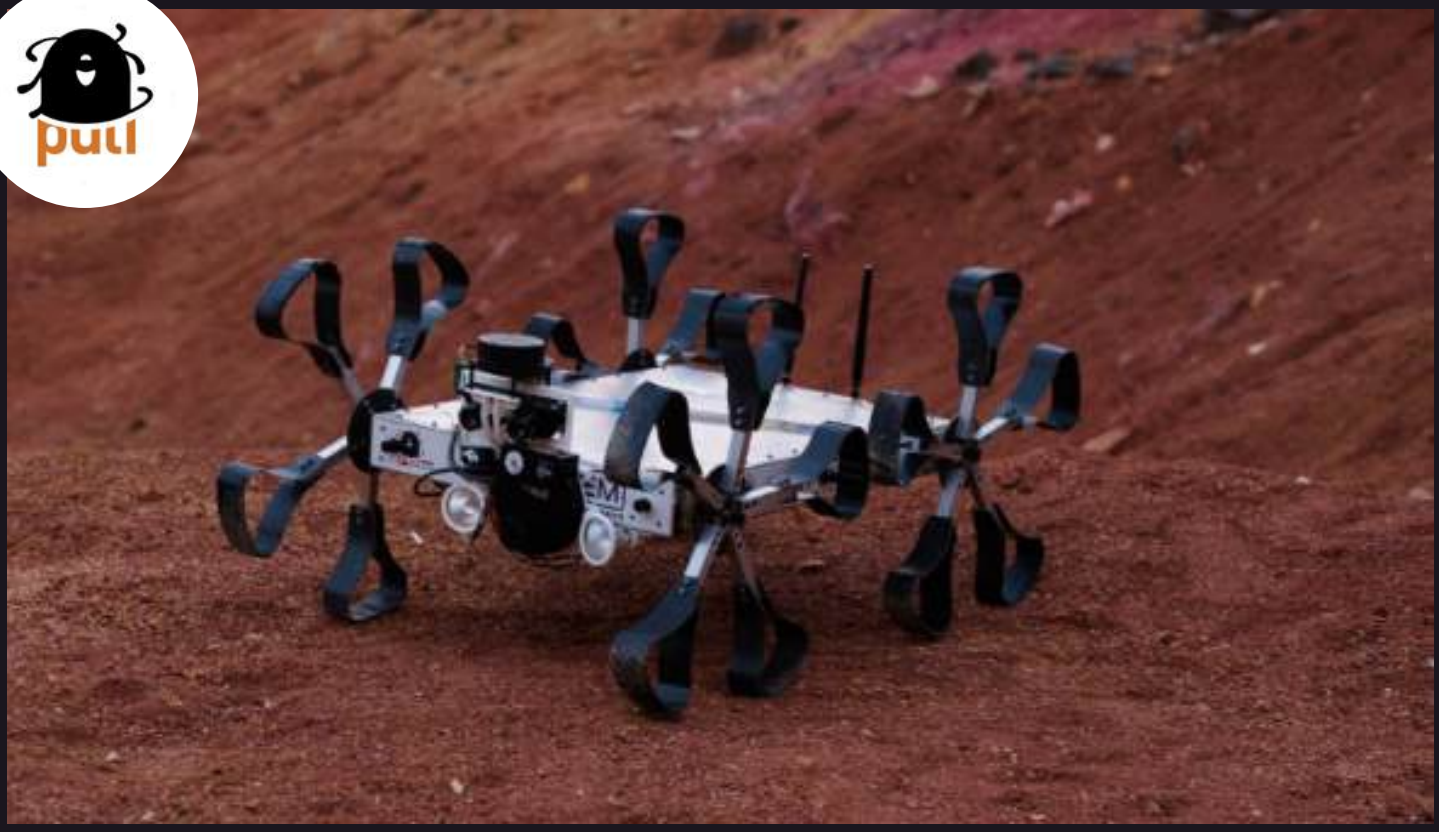
PROJECT 412

Low cost robot arm, SO-100 with Vision Language Action model.

IMDEX

REAL-TIME SUBSURFACE SOLUTIONS

pull



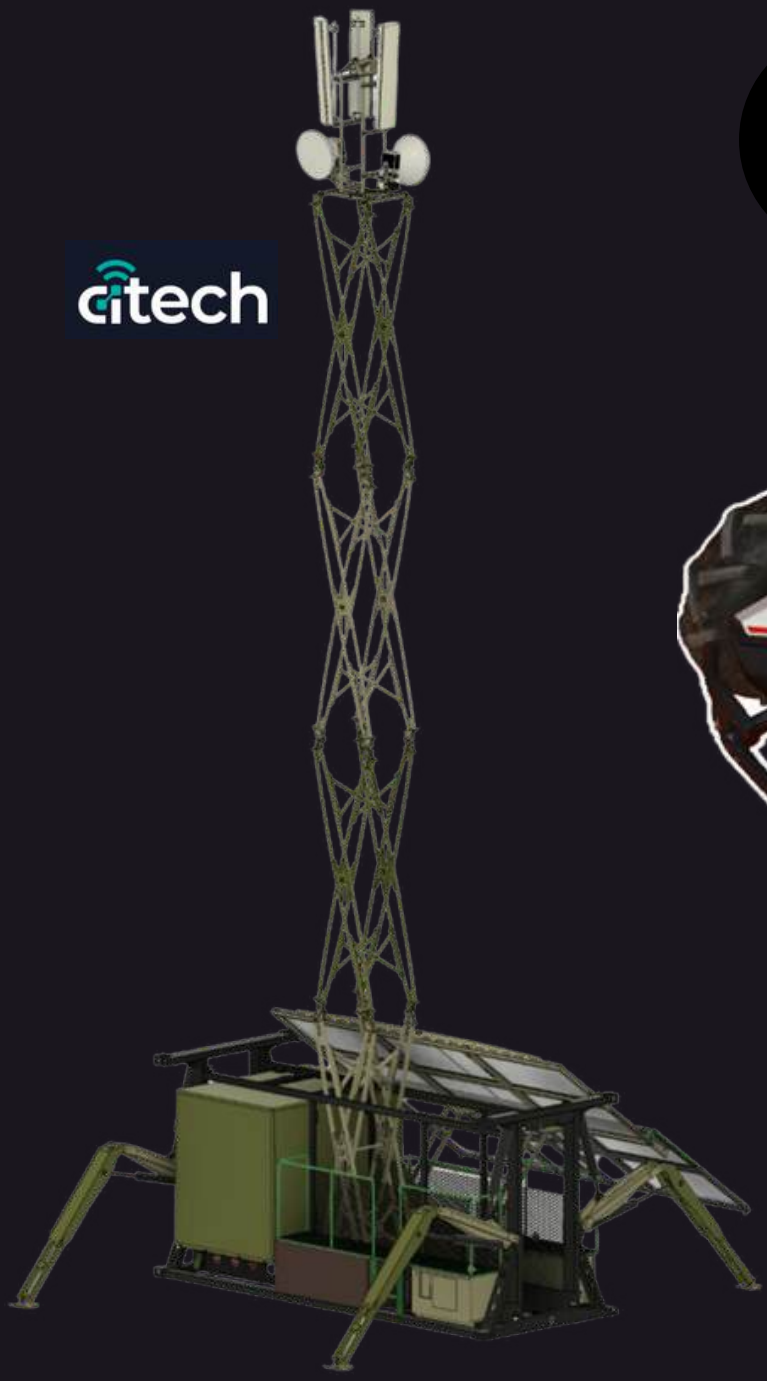
SRT

LHS-1 Lunar Highlands Simulant | LHS- 1D Lunar Highlands Dust | LMS-1 Lunar Mare Simulant

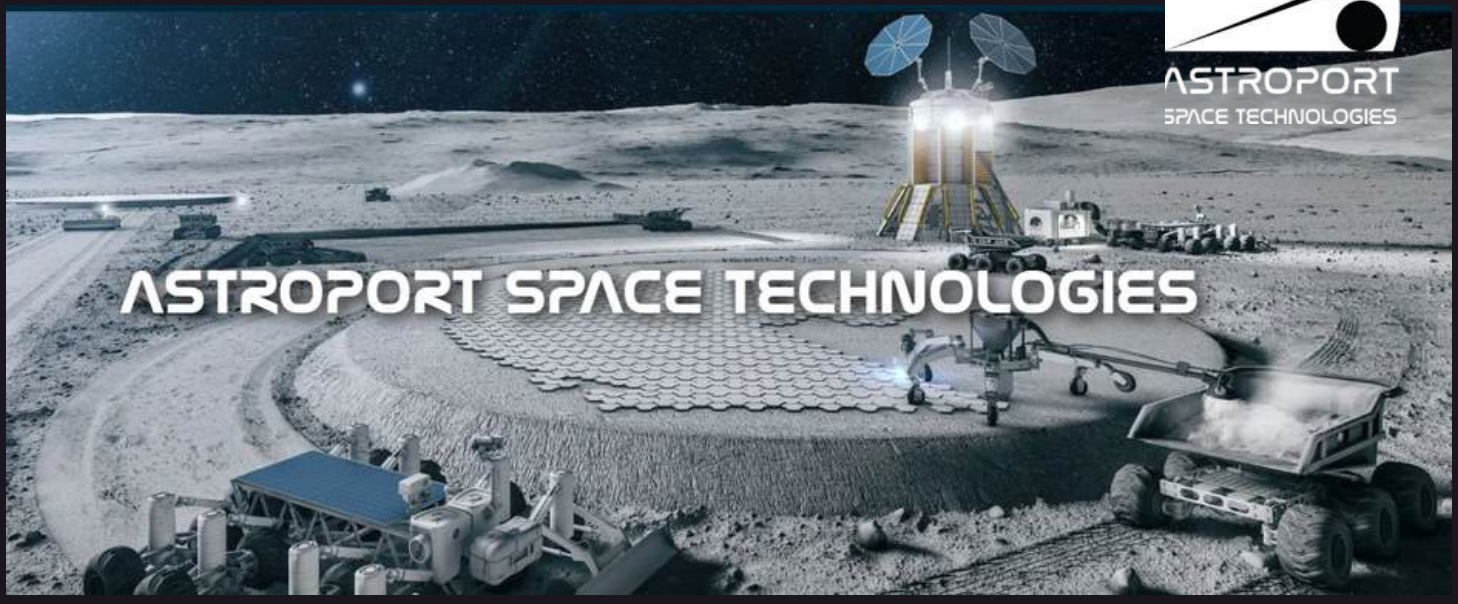
CHIRONIX

citech

UNCHARTED AI
AUTONOMY BEYOND BOUNDARIES



ASTROPORT
SPACE TECHNOLOGIES



IEEE TELEPRESENCE COMPETITION

> *The IEEE Telepresence Competition is a powerful step toward fostering the next generation of innovators, building teamwork, problem solving and remote robotics skills, and helping bring future talent into our field.*

The second annual Telepresence Competition will be held on 06 October 2025, in Perth, Australia. The challenge will take place as part of the Robopalooza.space 2025 event at the Australia Automation and Robotics Precinct (AARP), a world-leading collaborative innovation hub and Australia's largest test and development site supporting the advancement of automation, robotics, remote operations and zero emissions technologies.

The competition will challenge each team to move the rover remotely through an obstacle course as quickly as possible. Teams must navigate around each waypoint without hitting it. The team with the best time, less any penalties assessed for missing or hitting waypoints, will win a cash prize of $5000 USD split equally among the team members.

IEEE TELEPRESENCE COMPETITION TEAMS

UVA MARS

SK GODELIUS

TEAM RUNA

VSU TEAM

ECUADOR

USAFA DFCE TELEPRESENCE TEAM

RSC LAB

TEAM RUDRA

ADELAIDE ROVER TEAM

ECU ROBOTICS

UWA

PULI SPACE TEAM

TRON101

PROFESSIONAL ORGANISATIONS

AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS

A professional society for aerospace engineers and scientists. It provides a forum for advancing the art, science, and technology of aviation and space.

AMERICAN SOCIETY OF CIVIL ENGINEERS

The American Society of Civil Engineers is the oldest national engineering society in the U.S. It advances professional knowledge and improves the practice of civil engineering.

MOON VILLAGE ASSOCIATION

A non-governmental organization promoting global cooperation for the exploration and settlement of the Moon. It serves as a forum for all stakeholders interested in a "Moon Village."

IEEE TELEPRESENCE INITIATIVE

IEEE Telepresence is an IEEE Future Directions initiative launched in 2021 with a focus on advance telepresence technology that would enable a user's remote presence at a different physical location: a) feeling as if being there, and b) having a similar effect as if being there – in appearance to others and in effectual action, via telerobotics.

INDUSTRY ORGANISATIONS & COMMUNITY SPONSORS

ROBOTICS AUSTRALIA GROUP

A not-for-profit organization and peak body for robotics in Australia. It aims to foster a sustainable and internationally competitive national robotics industry.

AUSTRALIAN REMOTE OPERATIONS FOR SPACE AND EARTH

A not-for-profit, industry-led consortium that leverages Australia's remote operations expertise to transfer technology between the resources and space sectors.

THE GOLD ROOM PODCAST

A podcast focused on the mining industry. It provides a go-to source for industry insights, leadership perspectives, and discussions for mining professionals and enthusiasts.

DAMBURST

Damburst is the digital strategy and business advisory firm of Perth-based entrepreneur Charlie Gunningham. It helps businesses with digital transformation and growth by solving problems before they "damburst."

STARS ALIGN

Building a world united by knowledge and creativity with our mission rooted in the Sustainable Development Goals and the 2030 agenda. Leveraging local resources, partnerships, AI, space technologies, creative arts, and empathy

STARTUP SHOWCASE

Brought to Robopalooza 2025 by our Investment Partners, Atrico and Melt Ventures

> *The Robopalooza 2025 Startup Showcase connects bold innovators with decision-makers, spotlighting pilot-ready ventures that matter. It's about real solutions, sparking traction, and unlocking the next wave of breakthroughs!*

Melt Ventures focus on investing in companies that make physical products in clean tech, IoT, robotics and aerospace. Melt Ventures leverages over a decade of experience in investing in and developing hardware technology, running accelerator programs, and building extensive networks with founders, corporate partners, and other investors. We are committed to supporting Western Australia's emerging ecosystem as a partner in the Western Australian Venture Capital Initiative (WAVCI). Melt Ventures believes Hardware is the new Software. More at www.melt.ventures

Atrico works with tech companies to grow their value and to achieve successful M&A transactions. They are the leading global mining tech M&A advisor with over 30+ successful tech transactions and unparalleled industry networks and deal experience.

Atrico has a proven track record for rapidly scaling business performance and valuation with a unique mix of talent and experience across strategy, operations, and execution. The focus sits across both mining and the mining-space overlap.

There's nothing quite like the energy of putting cutting-edge startups in front of people who can truly move the needle, investors, partners, and major users. This event brings bold innovators together with decision-makers to spark traction, accelerate futures, and back the next wave of breakthroughs.

The **Robopalooza 2025 Startup Showcase**, designed to spotlight key ventures that not only align with the interests of our ~1,000 attendees (spanning mining, space and defence organisations, VCs, government, and tech service providers), but that are also foreseeably pilot-ready in the near term and have dual use applications.

This isn't about vague ideas; it's about startups bringing something real, actionable, and valuable to the table. Each founder will present what their solution is, why it matters to this audience, and what specific support unlocks immediate progress. It's a tightly run, high-impact format that ensures attendees walk away with concrete next steps and fresh opportunities, not just inspiration.

JUDGES

IVAN GUSTAVINO

Ivan is a co-founder of Atrico and an established authority on issues related to high–growth technology businesses and related transactions (Trade Sales, M&A, Capital Raising, Partnering, Licensing etc).

Ivan brings with him over 25 years of experience in technology company investment and deal making and has advised a large number of technology investors and businesses at the board level. Ivan's previous operational business background and subsequent investment and transaction advisory activity has proved invaluable for clients that seek advice on strategic deals. Ivan advises in all aspects of corporate strategy, growth and M&A transactions.

TAMRYN BARKER

Tamryn Barker is dedicated to growing Western Australia as a global innovation hub, supporting the solutions, capability and culture we need into the future. She leads the Founders Factory programs in Australia focused on accelerating the growth of world-leading startups in Mining and Nature Tech with Rio Tinto and the WA Government.

She also plays a key role on the evaluation committee for the Industry Growth Program, appointed by the Federal Minister for Industry and Science, funding innovative Australian startups in areas of national priority including mining, energy, automation, robotics and AI.

TRENT BAGNALL

At 29, Trent listed QMASTOR Limited [ASX:QML] and spent ten years building the QMASTOR into a successful tech company, which ultimately grew from 3 to 110 employees with offices in five countries. QMASTOR was acquired by Triple Point Technologies

Now as the Founder of Melt Ventures, The Melt and Slingshot Accelerator, his vision is to help motivated companies win. Trent has managed over 100 startup investments and works daily with founders to take raw entrepreneurial talent, supporting them to turn their inspirational ideas into successful companies.

LES DELAFORCE

As a strategic leader in R&D, innovation, and venture development, I work at the intersection of technology, sustainability, and impact. I currently lead R&D initiatives at a major mining company focussed on integrating emerging technologies including AI, robotics, and advanced environmental analytics.

As a former venture-backed founder of an AI Data Analytics startup, (a successful exit in 2019). I led the team from Australia, Canada, and Japan, raised venture capital with clients across ASX-listed to mining companies. At Minderoo I led the Innovatin, AI and First Nations technology portfolio.

JUDGES

YOSI LAHAD

Executive and serial entrepreneur specializing in intelligent systems and robotics, with leadership experience across both large corporations and small-to-medium technology ventures. A key figure in a complex, award-winning innovation project recognized with the prestigious Israel Prize for technological breakthroughs.

Co-founder and Chair of the Israel Intelligent Robotics Center, advising multiple innovation hubs on strategy and development.Frequent speaker at international conferences and leading universities on innovation, robotics, and intelligent systems. Senior consultant to the AI and Autonomy Directorate at Israel's Ministry of Defense.

DEREK GERRARD

Derek has been in the tech industry for over 25 years, working across Australia, the US, and the UK. He is currently the Managing Partner of the $55M Purpose Ventures Fund – investing primarily in early-stage, WA-based companies.

He is the Chair of the Malka Foundation, which provides significant funding to the WA startup ecosystem, and serves on the Advisory Council for the Curtin University Business and Law School. Prior to that, highlights include co-founding his own software company that was acquired by ASX-listed ERM Power, and establishing the RAC-backed BetterLabs Venture Fund and Innovation Studio.

MARK FRAYMAN

Mark is the Managing Partner of Orion Industrial Ventures (OIV), a venture capital offering focused on technologies that can enable a sustainable and economic supply of critical minerals, materials and new energy solutions to support industrial decarbonization.

OIV sits within the Orion Resource Group, an $8 billion private markets fund manager with strategies focused on metals, mining and industrial operations. Prior to joining Orion, Mark was Head of BHP Ventures, where he led the initial design, establishment and scale-out of BHP Ventures' investment platform and portfolio.

CHARLIE GUNNINGHAM

Charlie has spent more than 25 years in Perth's vibrant innovation ecosystem, as a successful startup founder, active angel investor, respected university lecturer, sharp media commentator and senior federal/state government executive.

He is currently Chair of StartupWA, a trusted member of the WA Government's Innovation Advisory Board, and Head of Ecosystem Engagement at Meshpoints, where he brings people and opportunities together to drive impact. Ever the all-rounder, Charlie also lends his rhythm as drummer for the Six Footers band, embodying both the spirit and the beat of WA's innovation scene.

MELT VENTURES SHOWCASE

A FOCUS ON EARTH BASED TECHNOLOGY COMPANIES

SILICON VANDALS

Silicon Vandals is an innovation studio in Sydney that works with founders & companies to validate product ideas, build prototypes, and launch market-ready products. They employ rapid experimentation, rigorous testing & MVP/pilot trial methods.

INTELLIGENT ROBOTICS

Intelligent Robotics (Australia) designs and delivers automation for industry. They apply advanced technologies to solve real industry challenges across sectors including meat-processing, mining, MedTech, and humanoid robotics.

ZABIDOU

Zabidou Pty Ltd develops ultra-vision systems for industrial robotics, offering high-speed material identification to enable real-time, low-cost separation. Their tech improves yield, lowers contamination, reduces process waste, and supports circular-economy goals.

PURALINK

Puralink builds autonomous robots (Ferret) for pipe inspection, mapping & repair. Their modular robots traverse complex pipe networks, perform long-range inspections with HD CCTV, LiDAR and generate compliant interactive reports. Geared for wastewater, stormwater, energy and mining.

SATELLITE STARTUP KIT

We test consumer electronics like Raspberry Pi and ESP32 under simulated space and mining conditions, creating proprietary datasets to replace guesswork with evidence. CubeSat teams use our data to design more reliable satellites, reducing failures and costs. Mining companies apply it to deploy rugged, low-cost electronics in extreme environments, avoiding costly breakdowns. By licensing these datasets, we make proven, affordable technology accessible, accelerating innovation across sectors

ATRICO SHOWCASE

FOCUS ON THE TRANSLATION BETWEEEN SPACE AND EARTH

XONA SPACE SYSTEMS

Their mission is to unlock the full potential of next-generation technologies such as autonomy and robotics, by providing the most robust and accurate navigation and timing infrastructure on Earth.

VOLUNA

Using drone-deployed neutron generators and AI-powered analysis, they deliver high-resolution subsurface insights without the delays, guesswork, or footprint of traditional exploration.

CISLUNE

Dedicated to advancing lunar exploration and enabling sustainable human settlement on the Moon through the development of innovative technologies in lunar construction, in-situ resource utilization (ISRU), and autonomous robotics.

CAPABILITYX

A leading remote operations technology provider dedicated to transforming how businesses manage and optimise their remote assets. By leveraging advanced automation, real-time analytics, and secure cloud infrastructure, they deliver unparalleled efficiency and productivity.

UNCHARTED AI

Their proprietary platform, TRACE, integrates AI, robotics, and advanced sensing to map and detect high-value mineral deposits with unprecedented accuracy.

> *Bringing live music into STEM transforms it into STE**A**M, adding creativity and expression that inspire fresh perspectives. Music fuels imagination, helping spark innovation and making the journey into science and technology more engaging, inclusive, and impactful.*

ECU EDITH COWAN UNIVERSITY

WAAPA

PRAIRIE OYSTERS EST. BSE

6 FOOTERS

ROBOPALOOZA WESTERN AUSTRALIA 2025

Western Australia has long been recognised as a global leader in resources, energy, automation and innovation, and is rapidly emerging as one of the most forward-looking regions across multiple sectors. With world-class research institutions, a thriving entrepreneurial ecosystem, and a progressive resource sector, WA has become a launchpad for cutting-edge solutions.

The State strongly supports initiatives uniting industry, government, and founders to tackle challenges from decarbonisation and climate resilience to automation and advanced manufacturing. This spirit of collaboration is evident in opportunities like space-enabled technologies and space-mining, where WA's strengths in remote operations, robotics, and resource extraction are directly transferrable to off-world applications.

Robopalooza is a shining example of this ambition, an internationally significant and highly prestigious event showcasing robotics, space and mining innovation.

Through strategic collaboration with powerhouse industry leaders and the strong backing of the Government of Western Australia, the region is demonstrating not just openness but true leadership in shaping the future of mining and technology.

Western Australia is not simply adapting to change; it is embracing it, championing emerging technologies, and setting the pace for what is possible both on Earth and beyond.

EVENT AGENDA, STEM DAY, OCTOBER 5TH 2025

STEM Day Proceedings, Sunday October 5th				Demonstrations & Music
10:00-10:05 10:05-10:15 10:15-10:25 10:25-10:35 10:35-10:45	Opening Session	MC & Event Partner, Michelle Keegan Robopalooza Global Founder, Rob Mueller Development WA, Kelly Howell Major Sponsor, Paulo de Souza, ECU Premier Sponsor, Carl Hendricks		**Thanks to the support of Edith Cowan University, WAAPA will be playing live music** during the course of the day after the opening session. **Demonstrations will be running across the dav and booths will be in place to learn more**, in parallel to the hands on STEM activities and presentations in the auditorium
		Hands On Activities	**Auditorium talks**	
10:45 -15:00	STEM Activities	Edith Cowan University Robotics Edith Cowan IGNIS NASA Ames, ARMADAS (hands on) PISCES University indigenous outreach Young Engineers Australia STEM Punks Curtin University (Binar and robotics) Curtin FIRST Robotics VEX Robotics UWA (multiple) Negentropic (Virtual Reality) Space Resource Technologies	Michael Kuzma (Self Playing Guitar) Mike Nayak (DARPA) Rob Mueller & Kenny Cheung (NASA) Edith Cowan & PISCES Katarina Miljkovic (Curtin) Gabrel Houston (US Air Force Academy) Michelle Keegan & Rob Mueller (Robopalooza)	NASA Ames, ARMADAS (large scale) Edith Cowan University Byrnecut Pulispace BHP Augment Technologies Chironix Cislune Unchartered AI Astroport Curtin University UWA Michael Kuzma Self Playing Guitar
15:00-15:15	Final Speeches	Chee Wong, Jade Singleton, Rob Mueller, Paulo de Souza, Michelle Keegan		
15:15-17:30	Music	Justin Davies, The Prairie Oysters, Six Footers		

IEEE Telepresence Competition (Training)	
07:15-08:00	UVA MARS
08:00-8:45	SK Godelius
08:45-9:30	Team RUNA
9:30-10:15	VSU Team
10:15-11:00	Ecuador
11:00-11:45	USAFA DFCE
11:45-12:30	RSC Lab
1:00-1:45	Team RUDRA
1:45-2:30	Adelaide Rover Team
2:30-3:15	ECU Robotics
3:15-4:00	UWA
4:30-5:15	Puli Space
5:15-6:00	TRON101

Note:
This event is primarily aimed at young children in primary school and high school, alongside parents and teachers

EVENT AGENDA, INDUSTRY DAY, OCTOBER 6TH 2025

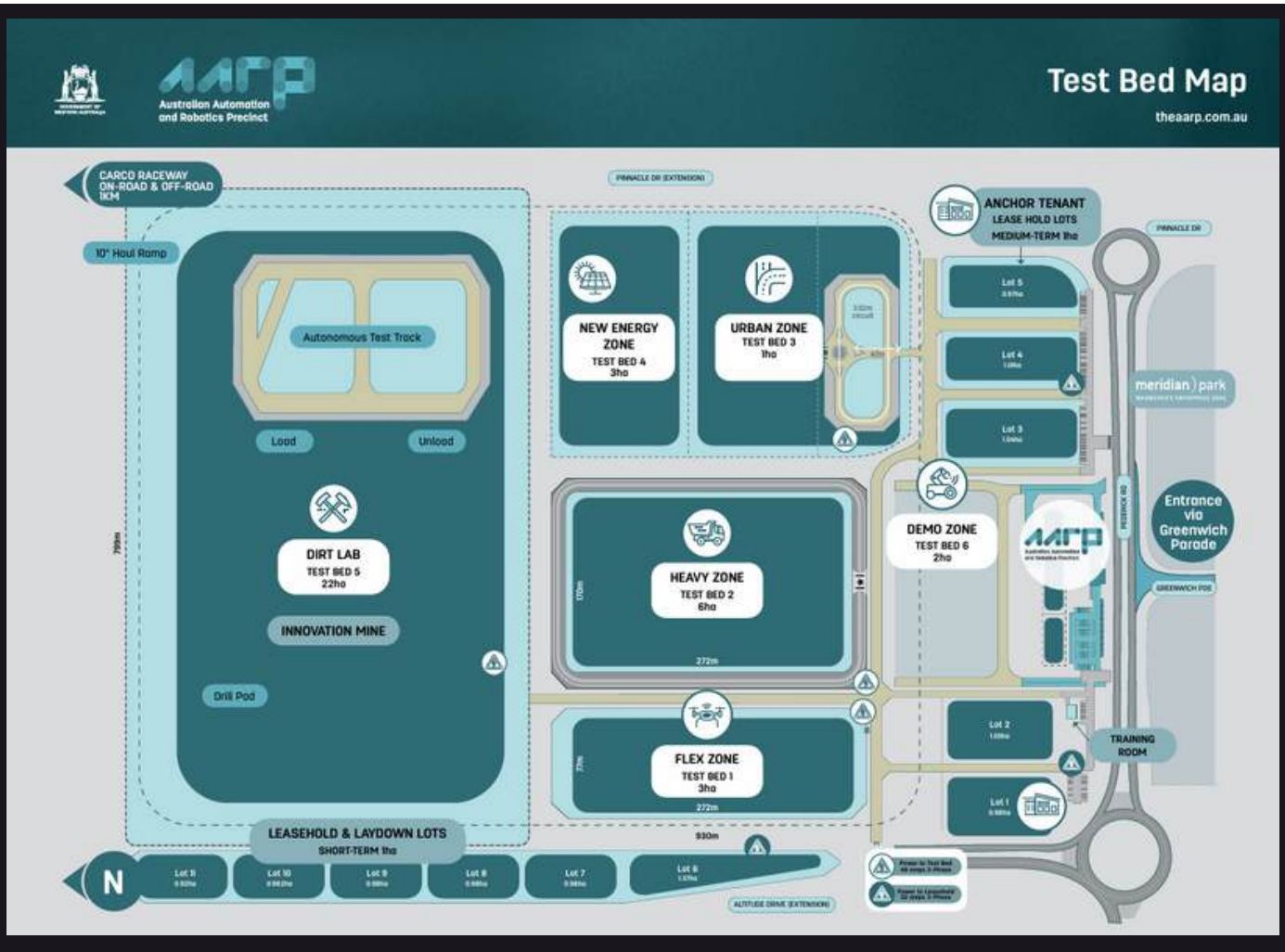
Industry Day Proceedings, Monday October 6th			Demonstrations	
8:30-8:35 8:35-8:45 8:45-8:55 8:55-9:05 9:05-9:15 9:15-9:25 9:25-9:40	Opening Session	MC & Event Partner, Michelle Keegan Official Opening Hon Minister Dawson Robopalooza Global Founder, Rob Mueller Development WA, Kelly Howell Major Sponsor, Paulo de Souza, ECU Premier Sponsor, Carl Hendricks Keynote Speaker, Mike Nayak, DARPA		
9:40-10:35	Pitch Event, Sponsored & curated by Atrico (multiple judges)	Session Chair, Nathan Kirchner Voluna Space Xona Space Capability X Uncharted AI Cislune	Demonstrations will be running across the day in parallel to presentations, panels and pitch sessions.	
12:00-2:00	Lunch			
2:00-3:00	Industry Present	Astrolab, Jevons Robotics, Greenroom Robotics, Freelancer, Impossible Sensing, Caterpillar		
3:00-4:00	Pitch Event, Sponsored & curated Melt Ventures (multiple judges)	Session Chairs, Nathan Kirchner & Alaxandrea Grace Puralink Zabidou Intelligent Robotics Silicon Vandals		
4:00-5:00	Industry Panel	Michelle Keegan, Linda Dawson, Rob Mueller, Anna Metke	Make sure you keep an eye on the growing list of demonstration companies and organisations at Robopalooza 2025!	
5:00-5:30	Final Speeches	Dave Magnoni, Rob Mueller, Paulo de Souza, Dave Matrai, Michelle Keegan		
5:30-8:00	Drinks/ Music	The Prairie Oysters, Six Footers		

NASA Ames, ARMADAS	Nexxis
Edith Cowan University	Cislune
PISCES	Uncharted AI
Byrnecut	Astroport
IMDEX	BHP
Pulispace	Citech
Space Resource Technologies	Project 412
Augment Technologies	Negentropic
Chironix	Intelligent Robotics
Curtin University	Puralink
UWA	Silicon Vandals

IEEE Telepresence Competition	
07:15-08:00	UVA MARS
08:00-8:45	SK Godelius
08:45-9:30	Team RUNA
9:30-10:15	VSU Team
10:15-11:00	Ecuador
11:00-11:45	USAFA DFCE
11:45-12:30	RSC Lab
1:00-1:45	Team RUDRA
1:45-2:30	Adelaide Rover Team
2:30-3:15	ECU Robotics
3:15-4:00	UWA
4:30-5:15	Puli Space
5:15-6:00	TRON101

Note:
This event is for students 18+ and industry only


Demo area
Car parking space
Food trucks, marquee & seating area
Competition zone
Key:
: Event border/fence
: Parking > rego walk
: Driving route
: Registration area
: Band set up
: Portaloo set up
: Food trucks
: Bar (monday)
: Generator
: Road block -
(authorised vehicles only)


Australian Automation and Robotics Precinct
Test Bed Map
theaarp.com.au
CARCO RACEWAY ON-ROAD & OFF-ROAD 1KM
10° Haul Ramp
Autonomous Test Track
Load
Unload
DIRT LAB
TEST BED 5
22ha
INNOVATION MINE
Drill Pod
NEW ENERGY ZONE
TEST BED 4
3ha
URBAN ZONE
TEST BED 3
1ha
HEAVY ZONE
TEST BED 2
6ha
FLEX ZONE
TEST BED 1
3ha
DEMO ZONE
TEST BED 6
2ha
ANCHOR TENANT
LEASE HOLD LOTS
MEDIUM-TERM 1ha
LEASEHOLD & LAYDOWN LOTS
SHORT-TERM 1ha
TRAINING ROOM
meridian park
Entrance via Greenwich Parade
N

NOTES

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ROBOPALOOZA.space