



# AUSTRALIA'S WEST: A GREAT PLACE TO LIVE AND INNOVATE

**Western Australia has a thriving State-wide innovation ecosystem with established co-working spaces where creatives, developers, entrepreneurs and researchers collaborate.**

These spaces are available to emerging businesses wanting to establish in Western Australia, and provide an introduction to the local culture and existing markets and networks. Perth has the international banks, financial institutions, and professional services to support innovators and entrepreneurs get their ideas off the ground.

Western Australia has a long history of technological innovation and is a world leader in eight of the twelve technologies required now and for the future: advanced robotics; energy storage; renewable energy; the internet of everything; oil and gas exploration; advanced materials; autonomous vehicles and automation of knowledge work.

The State's annual Innovator of the Year awards showcases the breadth and depth of WA talent, and WA technology start-ups regularly feature in the top ten Techboard rankings. Investors have recognised the potential of Western Australia as a regional ICT hub, with the Cisco Internet of Everything Innovation Centre, being established in Perth in 2015.

The State is known for its natural resources, but one of the least known commodities is data. The State Government has an open data policy with more linked data being made available to help solve government and social problems. Western Australia's data analytics capacity is being

broadened through the State's involvement in hosting the international Square Kilometre Array radio telescope. Data is being analysed in Perth using the Pawsey supercomputer, the largest super-computer in the southern hemisphere.

There are five universities in Western Australia preparing students, innovators and entrepreneurs for the State's digital future in our areas of competitive advantage:

- radio astronomy
- mining and energy
- cyber security
- biomedical science
- biodiversity and marine science
- agriculture and food

The State is also home to world leading research institutes that attract world class researchers who are drawn to the quality of the research and the State's enviable climate and lifestyle.

Western Australia is the nation's gateway to Asia and shares a time zone with 60 percent of the world's population (+/- one or two hours) who are responsible for generating 40 percent of the world's GDP. There is a ready customer base for WA innovation in these countries, and the State has longstanding business links with China, India, Japan, South Korea and Indonesia.



# Education Technology

While Western Australia has world class educational institutions such as the University of Western Australia, Curtin, Murdoch, Edith Cowan and Notre Dame universities, changes driven by technology are already significantly altering the way learning is undertaken, as rapid developments in IT capabilities disrupt traditional models and education. Companies and the learning institutions are collaborating to take advantage of the local advances in educational technology that is having an impact on learning worldwide.

## Moodle

Moodle - the world's open source learning platform - allows educators to create a private space online filled with tools for collaborative learning.

With a mission to “empower educators to improve our world,” Dr Martin Dougiamas first released Moodle in 2001.

Today, Moodle is used in every country in the world by over 100 million registered users.

Moodle is the chosen learning platform in many K-12 schools - on primary and secondary levels - to create collaborative learning environments.



Higher education institutions - such as Open University (UK), Monash University (Australia) and Columbia and California State Universities (USA) - use Moodle as a key part of their operations.

Within the workplace sector, organisations such as the United Nations, UK Government, US Defence Force, Shell and Google also use Moodle as an internal learning platform for inductions, on boarding, professional development and more.

Moodle's open source project and development is supported by its global

community of users and network of Certified Moodle Partners, who offer a range of tailored Moodle services and support.

Moodle's headquarters are based in Perth – Moodle's birth city - with satellite offices in Barcelona, the UK, Belgium, Canada, Czech Republic, India and USA.

Moodle has received many education and technology awards, such as the 2007 WAITTA Incite Online and Exporter Awards and the Google-O'Reilly Open Source Award.

[www.moodle.com](http://www.moodle.com)

### Contact:

Ph: +61 8 467 4166

E: [support@moodle.com](mailto:support@moodle.com)

# Mining equipment, technology and services (METS)

The State's capital city Perth is a global centre for servicing mining projects, and a hub of scientific and technological innovation driven by the needs of the energy and resources sector. The State continues to drive innovation to support the evolving needs of the mining sector, relying heavily on the mining equipment, technology and services (METS) sector.

Attracted by the strength of Western Australia's mining sector, many international METS companies have chosen to expand operations to include Perth through acquisitions, partnerships or opening their own local office. Companies such as IBM, with its first Natural Resource Solutions Centre for Mining, and BASF have positioned themselves in Perth to access the technologies and innovations associated with local METS companies and research institutes.

## Minnovare



Minnovare was formed in 2012 to commercialise world-first technology known as the Azimuth Aligner®, which helps align drill rigs before they commence work.

The company is focused on the development and distribution of products designed to eliminate unproductive processes, and increase productivity within global mining and civil construction industries.

The device allows drillers to line up a drill rig in mining or construction more accurately and in a fraction of the time required using traditional alignment methods. For miners and construction drilling contractors this means drilling programs are completed faster cheaper and more accurately.



The Azimuth Aligner has been used on some of the world's largest construction programs such as the London Crossrail project, and is widely used by many tier one miners and exploration drilling contractors.

Minnovare plans to build on the success of the Azimuth Aligner by becoming a leading integrated technology company, concentrated on the development and distribution of products designed to eliminate manual, labour intensive and unproductive processes from global mining and construction industries.

[www.minnovare.com](http://www.minnovare.com)

### Contact:

Michael Beilby, Commercial Director

Ph: +61 8 6381 0076

E: [mbeilby@minnovare.com](mailto:mbeilby@minnovare.com)

# Medical Technology

Western Australia has a history of successes in medical and health research, a heritage that has been recognised by Nobel Prizes, Australian of the Year awards, and international prizes and fellowships. This tradition is underpinned by extensive collaboration between the State Government, universities, medical research institutes and private health providers. Western Australia offers investment opportunities ranging from discovery research through to product development partnerships.

## Microscope-in-a-needle

The microscope-in-a-needle was developed in the Optical + Biomedical Engineering Laboratory at The University of Western Australia to assist surgeons with identifying which tissue to remove during surgery. Originally developed for breast cancer surgery, the device is now being expanded to new applications in brain cancer and lung cancer. It was recently integrated into a brain biopsy needle to allow neurosurgeons to perform safer brain biopsies.

The invention comprises a tiny fibre-optic imaging probe, small enough to be encased within a hypodermic needle. It provides surgeons with real-time, high-resolution imaging deep inside the body.

The probe has recently been licensed to an Australian imaging company Miniprobes Pty Ltd., who are translating the technology from the lab into a range of medical devices. Under the terms of the agreement, Miniprobes is granted worldwide development and commercialisation rights for three patent applications associated with the technology.

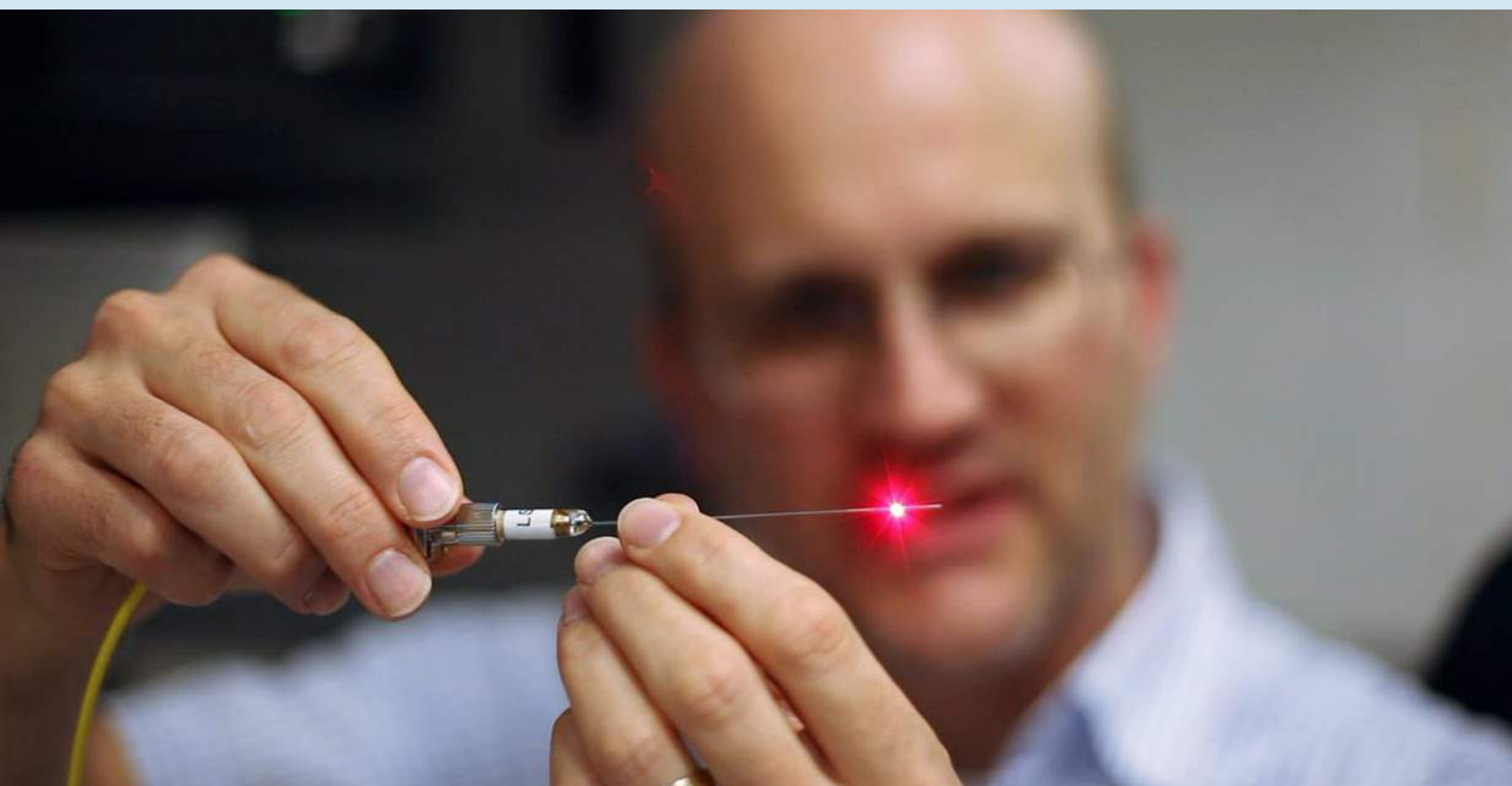
[www.miniprobes.com](http://www.miniprobes.com)

### Contact:

Robert McLaughlin, Managing Director, Miniprobes

Ph: +61 400 186 544

E: [robert.mclaughlin@miniprobes.com](mailto:robert.mclaughlin@miniprobes.com)



# Financial Technology

Western Australia's innovation ecosystem has disruptive and innovative technology companies that are redefining financial services across all areas of financial technology (FinTech) such as big data, cybersecurity, blockchain and crypto technology.

The work of these companies is helping to deliver more efficient financial markets, more customer-focused outcomes for consumers and providing the safety that companies need to conduct their everyday business.

BankVault.com



**BANKVAULT**  
Cyber Security

BankVault stops bank account hacking. It secures critical online transactions by creating invisible endpoint devices which are secure, anonymous and untraceable.

Cybercrime's growth is exponential. \$500 Billion in 2015. \$2 Trillion by 2019. \$8 Trillion by 2022. The goal is your bank account. Most cyber-attacks target endpoint devices (PC/ Smartphones). In every cyber heist the banking Fob/Token or SMS is defeated. Banks investigate before reimbursing and the delay can cripple cash flow and destroy a business.

BankVault sidesteps cyber-attacks by providing pristine instant endpoints that are invisible to hackers, preventing bank account takeovers, ransomware, et al.

June 2016 - Awarded Top Fintech Startup world-wide at the World Cup Tech Challenge hosted by Microsoft and Silicon Valley Forum. A competition spanning 30-50 countries.



April 2017 – Two hour round table presentation to the U.S. President's Senior Advisor on Cyber Security, the former Mayor of NYC, Rudy Giuliani.

June 2017 – Released a new concept in cyber tech for mobiles, an "Invisible Keyboard".

Founded by Tech Entrepreneur Graeme Speak in Perth Western Australia, it now has offices in Sydney, San Francisco and is looking for channel partners to launch in Europe.



[www.bankvault.com](http://www.bankvault.com)

**Contact:**

Graeme Speak, CEO/Founder

Ph: +61 417 994 880

E: [gls@bankvault.com](mailto:gls@bankvault.com)