



techtrails

Handbook

Esperance Senior High School
Wednesday 11 March 2020



If you can see her, you can be her.

An initiative of Women in Technology WA

Welcome to Techtrails!

We hope you enjoy some of the stories you hear from our science, technology, engineering and maths professionals today and that they inspire you to explore the myriad of exciting careers available in Western Australia and the world.

Whatever your dream or your passion, we hope you take something away with you today to get you started on your own 'tech trail'.

In the words of someone wise...

The most difficult thing is the decision to act, the rest is merely tenacity.

Amelia Earhart

About WiTWA

WiTWA is a Perth-based, not for profit organisation providing a framework for women in tech [+] to extend their networks and expand their knowledge on a broad range of professional topics. Through a wide range of events, open conversation, deliberation and debate on behalf of our members and industry, WiTWA strives for business change to accommodate diversity and provides a network of support for women in technology, science and innovation.

witwa.org.au

 @WITWA

 @womenintechwa

Event program

8:45am	Welcome
9:30am	Group presentations and discussions
10:30am	Break
10:45am	Group presentations and discussions
11:45am	Break
12:00pm	VR and group presentations
1:00pm	Break
1:30pm	VR and group presentations
2:45pm	Closing address

Do you know what you want to be when you leave school?

To help you understand the exciting options waiting for you beyond the classroom, check out our digitalised **Techtrails Toolkit!**

Find out where your interests and strengths could lead you. Meet our 40 avatars with jobs of the future and explore the different pathways open to you. It's fun, free and easy.

So...what are you waiting for?

Access the toolkit from: toolkit.techtrails.org.au/ and start clicking to explore your possibilities!

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INSPIRING FUTURE SKILLS



Pia Turcinov

Chair, Women in Technology WA

Pia Turcinov started her career as a lawyer after graduating from the University of New South Wales with a double degree in Arts and Law. Since her early days practicing corporate and commercial law in Sydney, she has held many roles and shaped a career for herself in business. Influenced by her childhood spent in Austria, Pia has always been interested in people's stories, their ideas and how they approach problem solving.



Today, Pia manages what she calls a “portfolio career”; working for herself and holding a number of different positions which are all connected through a common focus offered through technology and innovation.

Pia's passions have seen her create international business programs, operate the Innovation Centre of Western Australia, start and co-found a number of different ventures and work as a non-executive director with other businesses looking to grow and prosper. She is Chair of Women in Technology WA, a not for profit network championing greater diversity and inclusion of women in technology. WiTWA wants to see more women in tech [+] roles and organisations and to help progress those already in these careers as we achieve greater parity and equality. She is very excited to be able to bring Techtrails to you today.

Stay in touch with Pia: @ Pia@witwa.org.au

Kay Hargreaves

Deputy Chair, Women in Technology WA

Kay was introduced to technology at the age of twelve by a very forward thinking Head Teacher who insisted that all her students were introduced to computer programming. Since then, technology has always been a part of her working life. Starting as a Marketing Executive for a travel company, she discovered that her passion lay in harnessing the benefits of new technologies and became an evangelist for its use in the publishing sector. As Head of Publishing for the largest holiday company in the world, Kay was responsible for changing the way holiday brochures were produced by using software and Apple computers.



In 2003, Kay moved to Perth where she changed career direction and became an owner of a printing company. It didn't take long before she was introducing technology to the company and an IT division was created.

Today, she is the owner and Managing Director of Colleagues Matrixx: an IT company specialising in writing software that transforms the way businesses collect and manage data to improve their business processes.

Stay in touch with Kay: @ Kay@witwa.org.au

Emmaline Yearsley

Community Manager, Techtrails

Emmaline has a Bachelor of Science (Environmental Biology) and a Bachelor of Social Science (History), as well as a qualification in Photography. Originally from California, she is fascinated by the diversity of plants around the world and the unique plant life in Western Australia. This led to her researching how seeds grow after fire. She has worked at Curtin University in a diversity of roles, from research assistant, field assistant, and laboratory technician. It was also here she began to foster her love of education, working as a genetics course demonstrator.



Since this time, Emmaline has pursued a career in science education and communication. She has worked in some exciting places, including Scitech in the CSIRO Lab and as the Community Partnership Advisor working on projects like National Science Week and managing the Inspiring Australia program, as well as at the WA Museum.

As the Techtrails Community Manager, she gets to showcase amazing women working in STEM, and share their stories. She loves her career path because she gets to continually learn new things and meet new people.

Stay in touch with Emmaline: @emmaline@witwa.org.au



The fourth industrial revolution - what is your STEAM?

Gry Stene

STEAM Engine Global & WiTWA
Chief Orchestrator | Geek Whisperer |
STEAM Advocate



As AI, bots and other technologies infiltrate our lives and become a prominent part of decisions and the way we do things, many of us wonder if we have jumped on a runaway train. In this fourth industrial revolution where we merge the physical, digital, and biological spheres, commonly known as the cyber-physical systems, we need a new kind of STEAM to power our future.

Gry Stene is a tech entrepreneur, STEAM advocate and a 'geek whisperer'. She studied Computer Science and started work in the software industry as a programmer 30+ years ago, but soon realised she was more fascinated by the problems technology could solve than purely the engineering.

Gry strongly makes the case for bringing an A into the STEM agenda to create STEAM (Science, Technology, Engineering,

Arts and Mathematics). She believes that STEAM makes room for technical expertise, creativity, design, languages and compassion to coexist beautifully as one.

Taking this to the next level, Gry has set up STEAM Engine Global, a social enterprise that works with industry, government, schools and education, students and community to co-create programs such as a Youth Engagement Program that helps participants discover their potential and superpower in a technology fuelled future.

In this session, Gry shares her optimism and vision for a future that is underpinned by diversity and a real connection between people and technology, helping you find YOUR STEAM through co-creation.

Check out Gry's TEDx Talk: Powering our future with AI and STEAM.

Stay in touch with Gry: <https://grystene.rocks/>

NOTES:

Esperance Shark Monitoring Project



Shelley Payne

Councillor

Shire of Esperance

Shelley has lived in Esperance for 20 years. She has three children who attend Esperance Senior High School – Emily, Mason and Jack.

Shelley completed a Bachelor of Engineering, and then went on to complete a Masters in Business and the Environment. She has always had a strong interest in the environment and how we can all live more sustainably. In 2017, Shelley was elected to the Esperance Shire Council.

Shelley is married to an abalone diver and sharks have been a big concern for her and her family. Both Shelley and her husband Marc have a strong interest in helping to make Esperance beaches safer from sharks.

When the Esperance Ocean Safety and Support Group was formed by Mitchell Capelli in 2017, both Shelley and Marc joined the group. The group has been actively working to implement research projects that will help the Esperance community learn more about white sharks.

In September 2019, the Ocean Safety and Support Group launched the Esperance Shark Tracking Project to learn more about shark movements in the Esperance Bay.

Stay in touch with Shelley: @ shelley_payne@bigpond.com

NOTES:

Empowering people to use technology in happy and healthy ways

Kim Maslin

Digital Technologies Educator



Kim is a passionate educator and author who has spent the past ten years teaching learners aged from five to 85 how to use digital technologies.

After graduating from school, she completed Honours in Communication Studies and a Diploma of Education at the University of Western Australia. She is currently completing a Doctorate of Education at Curtin University.

Having been interested in technology, media and education from a young age, Kim knew her career would lie somewhere within these industries ... although she had no idea what her day-to-day life would look like. However, she knew her job had to include creativity, scalability and flexibility – a 9-to-5, Monday-to-Friday gig just wasn't for her!

Kim has enjoyed the different roles she's had as a teacher, ICT support and

marketing officer. These experiences led her to take the plunge and start her own business, delivering workshops and offering graphic and website design services. She's an active member in her community, serving on the Esperance Community Arts Board and as a sponsor of the Esperance Chamber of Commerce and Industry.

Her main project is 'The Tweeting Galah' children's cybersafety book series. To date, Kim has published three books in the series, all of which are being used across hundreds of schools in Australia and beyond. It's Kim's dream to see these books used in every primary school in the country!

With no working week quite the same, Kim loves how she's able to have lots of fun while at the same time make a difference in supporting the happy and healthy use of technology.

Stay in touch with Kim: @ kim@kimmaslin.com

NOTES:

From little things, big things grow - a journey through the farming system



King Yin Lui

Research Scientist

Department of Primary Industries and
Regional Development

King Yin would never have thought of Agriculture as a career growing up, though her journey into the industry has been an organic one. She loves the variety of issues to tackle and that you can be in the paddock one day and analysing data the next.

King always had an interest in nature, though the first time she went to university, she enrolled in journalism and soon found out it wasn't for her. After some time off, she returned to do environmental biology. Unsure where to take her degree, she spent a few years travelling, visiting other cultures and landscapes and working odd jobs in Australia and abroad. She realised it wasn't strictly biology that interested her, but the interaction between people

and culture within the environment. When she won a scholarship to do research in agriculture, she found the possibilities excited her and she has continued.

Her work has included looking at ways to sustainably grow plant protein sources, researching the things that drive the way farmers make decisions, and the genetics of how pathogens cause disease on plants. Her work and travels have brought her all around the world from Russia, to Canada, to Hong Kong, and Tanzania, and she now calls Esperance home.

Stay in touch with King: @ kingyin.lui@agric.wa.gov.au

NOTES:

Marine Department – vessel movements

Lydia van der Walt

Shipping Officer

Southern Ports Authority - Port of Esperance



Lydia started her career as a Rostering Clerk at the Port of Esperance during 2012. She worked in Operations and scheduled labour to work on the vessels around the Port.

She then moved over to the Marine Department to become the Shipping Officer and scheduled all the Port's vessels. During 2016, Lydia took on a newly created role to assist the Harbour Master and Pilots with their day to day duties, including the scheduling of vessels. She is extremely happy she can work from home through her remote login.

Lydia helps with the Pilot Roster and is the first point of contact for all the Port's Shipping Agents who send her daily online updates about their vessels. She then starts tracking the vessels via satellite and allocates berths or Anchorage

positions for the vessels when they arrive. She liaises with all the Port staff about the upcoming shipping schedule and talks on VHF radio/marine radio with the vessel captains.

Before starting with the Southern Ports Authority, Lydia completed the study in computer software packages, programming and then a Diploma in Operations, Production & Productivity Management (Scheduling of Operations).

Stay in touch with Lydia: @ Lydia.vanderWalt@southernports.com.au

NOTES:

Stores and Inventory – servicing all port departments



Corinne Waight

Stores and Inventory Manager
Southern Ports Authority - Port of Esperance

Born in Esperance, Corinne attended Nulsen Primary then Esperance Senior High School. She enjoyed science and maths at school however she enjoyed sport and socialising more.

After high school, Corinne worked in admin/data entry positions at a local fuel distributor and accountancy firm before starting at the Port in 2003 as a Maintenance Clerk.

Corinne quickly got involved in many projects at the Port, including setup and implementation of maintenance planning software. During 2010-11, she relieved the positions of Maintenance Planner and Stores and Inventory Manager. She then went on to be successful in securing that position full time in 2012.

Her new position opened up opportunities to learn skills usually associated with male-dominated roles, such as driving

forklifts, using power and hand tools, using various kinds of strapping systems, as well as a steep learning curve on parts and equipment kept for use by the Port's maintenance team.

The small Stores team services many departments and therefore requires a very broad range of knowledge. Stores staff rely on good communication and teamwork with these departments to deliver good customer service.

Corinne loves the diverse challenges her job presents; no two days are ever the same. She was also very honoured to receive the Employee of the Year award in 2019.

When not at work, Corinne volunteers in various capacities within the Esperance netball community. The offseason is usually spent catching up on jobs at home, reading, beaching and hanging out with her family.

Stay in touch with Corinne: @ Corinne.Waight@southernports.com.au

NOTES:

Environmental monitoring - our front line of defence

Catherine Field

Environmental Advisor
Southern Ports Authority - Port of Esperance



Catherine is an experienced environmental scientist with over 20 years working in various facets of the environmental, marine and agricultural industries. She currently works for Southern Ports – Esperance as an environmental advisor.

She enjoyed science, geography and English at high school and always had an affinity with nature while growing up on a farm and assisting her Dad.

Catherine started her career by attaining a Bachelor of Environmental Science (Honours) from Murdoch University and later a Graduate Certificate in Landcare. She originally started working for a farming organization in Perth before moving to Esperance and starting her own environmental consulting business which she ran for over 11 years while raising three girls.

Previously, Catherine was a Director in a family-run mixed livestock and cropping farm enterprise for 14 years and obtained valuable financial, marketing and business skills during that time.

Catherine has working in areas such as natural resource management, environmental risk management, river restoration, coastal management, land use planning, weed and pest management, air quality management, marine management, wastewater management, waste and recycling, soil management, bushland regeneration and revegetation, as well as groundwater and surface water management for local and state government departments, and NRM and farming groups.

Stay in touch with Catherine:  catherine.field@southernports.com.au

NOTES:

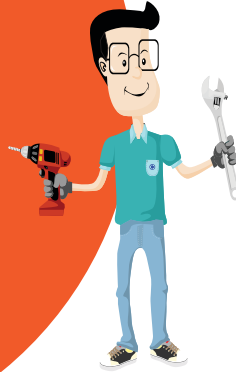
Virtual Reality Session Notes



A person is working on a 3D printer in a workshop. The printer is a white and black machine with a blue nozzle. The person is holding a blue tool and is adjusting the printer. The background is a blurred workshop with various tools and equipment. The text "NOTES:" is overlaid on the top left of the image.

NOTES:





Thank you for joining
us today!

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INSPIRING FUTURE SKILLS

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