



STUDENTS' PROGRAM

JUNE 03

15:00-16:00 Students and Teachers arrive at the hotel

16:00-16:45 Welcome by Dr. Pol Koutsakis, CodeCrush Program Coordinator

16:45-17:30 Amazing Race to explore the Murdoch University campus

17:30-18:15 Dinner

18:15-19:00 Quiz games

19:00 Return to the hotel

JUNE 04

9:00-10:15 Kate Kirwin, Workshop: "Coding is a Piece of Cake", Room 360.1.010

This is a hands-on workshop that introduces girls to coding through the magical world of cupcakes. By the end of the session you'll see how coding is like baking (following a recipe and coming up with something unique) - and we'll even play a fun game called Cupcake Smash! This workshop is facilitated by She Codes Australia, a coding program for women trying to close the gender gap in technology, one cupcake at a time.

Kate is passionate about world changing ideas and is dedicated to building pathways for women to enter tech careers. Kate Kirwin founded She Codes Australia in 2015, providing the networks, technical skills, and confidence for women to enter tech careers. Kate's motto in life is 'Always Bring the Sparkle' - you can usually find her wearing bright colours, building community and holding a microphone. Kate firmly believes in the power of curiosity, connection and creativity. When she's not working in tech, she's a passionate hula hooper and Swiftie. Her professional achievements have been recognised with the Business News 40 Under 40 Award, a Women in Digital Champion of Change award, and The West Australian's Rising Star Award. She was recently named as WA's 2024 Young Australian of the Year.

10:15-10:45 Coffee/Tea Break

10:45-12:00 Joe Stevens, Workshop: “Internet of Things”, Room 245.3.063

The Internet of Things workshop demonstrates how code and the physical world can and will be connected. Students are introduced to some basic coding techniques and they will use them to control the lab lighting, eventually integrating a temperature sensor.

12:00-12:45 Lunch

12:45-14:15 Panel Discussion: Female Academics from the Murdoch School of IT and Mrs Petra Trinke (Women in Tech WA) discuss their lives and careers.

Panelists: Associate Professor Guanjin Wang, Dr. Fatemeh Rezaeibagha, Dr Joo Yeon Park, Dr Fatuma Namisango, Dr Beena Kishore, Dr Megan Busey, Mrs Ranjit Kaur, Mrs Despoina Giannakaki, Mrs Petra Trinke. Room 360.3.032

Associate Professor Pol Koutsakis will moderate.

14:15-15:00 Coffee/Tea Break

15:00-15:45 Prudence Jofirisi, Talk: “Zero to Cyber: My Journey into STEM and Cybersecurity”, Room 360.1.010

Prudence began with little knowledge of computers, but a burst of curiosity led her on an unexpected adventure into STEM. Incredible mentors and real-life challenges helped her discover the mysteries of cybersecurity. Join her as she shares how passion and guidance can turn a simple start into an exciting tech adventure!

16:00-17:15 Andrew Schembri - Murdoch University Outreach Team, Workshop: “Sphero robots”, Room 360.1.010

Join the CodeCrush Lets Get Rolling Challenge to enhance your coding skills with advanced JavaScript techniques. Compete in a gamified workshop using Sphero robotics to complete exciting tasks that test your problem-solving and creativity. With guidance from experienced mentors, you'll gain hands-on experience and a deeper understanding of real-world coding applications and exposure to JavaScript.

17:30-20:00 Dinner and Video Games at the Gym/Esports Hub

JUNE 05 (COMMON PROGRAM FOR STUDENTS AND TEACHERS)

10:15-12:45 Excursion from Murdoch University to Immersive Technologies headquarters, Osborne Park.

What's in store for you?

Hey Code Crush Students, welcome to Immersive Technologies! We're super excited to have you at our Osborne Park Office. Get ready for an unforgettable experience! **Remember to wear closed in shoes, this is a safety requirement.**

Drive the Big Machines: Ever wondered what it's like to drive a massive mining truck? Now's your chance! You'll get to hop on our state-of-the-art simulators and test your skills driving different mining machines.

Underground Adventures: Dive into the world of underground mining! Operate a complex machine and explore a realistic underground mine site. It's like being in a real mine, but way cooler!

Top Gun Challenge: Think you have what it takes to be the best? Compete with your friends to load the most earth into a truck using a digging machine. Who knows, you might just become our Top Gun Operator!

Meet the Developers: Ever wondered what a day in the life of a software engineer is like? You'll get to chat with our developers, see where they work, and learn all about their exciting projects.

We can't wait to meet you all and share this incredible experience. See you soon!

About Immersive Technologies

At Immersive Technologies, we're proud to be driving continuous improvement of human performance within the mining industry. As part of the global Komatsu Group, we're the world's largest supplier of mining equipment simulators, with our cutting-edge solutions deployed in over 50 countries.

What makes us special?

Driving Excellence: *We're dedicated to continuously improving human performance in mining, making operations safer and more efficient.*

Global Impact: *Our simulators are used worldwide, helping operators from different corners of the globe enhance their skills and safety.*

Innovative Projects: *Our team in Perth works on some of the most exciting and innovative development projects. From real-time simulation and low-level hardware interfacing to web development and data analytics, our developers get to explore a diverse technology stack.*

Learning & Growth: *At Immersive, there are endless opportunities to learn and develop new skills. Our projects make a real difference, and our team loves being part of something that truly impacts the industry.*

12:45-15:00 Excursion from Immersive Technologies headquarters to Bankwest Headquarters, Raine Square, Perth. Lunch at Bankwest

15:30 Return to Murdoch

15:30-16:30 Break – return to the hotel

16:30-17:00 Afternoon Tea

17:00-18:30 Squadrone, Workshop+Drone Show. Workshop in room 360.1.010

The drone show will take place at the Kim Beazley Lecture theatre.

In this engaging workshop, students will explore the exciting world of drones, learning about their real-world applications, safety protocols, and how they are transforming industries. They will first test their flying skills in a simulator before programming drones to complete dynamic flight missions using block coding. To inspire further learning, the session concludes with a captivating drone light show, demonstrating the creative and technological potential of drone swarming and automation.

18:45-19:30 Dinner

19:45-22:00 Movie Night, Kim Beazley Lecture Theatre

JUNE 06

9:00-10:30 Vanessa van Beek, Workshop: "Lego Serious Play", Room 360.3.032

While leading a Security Operations Centre in 2021 Vanessa began experimenting with LEGO Serious Play (LSP) as a means to provide a safe space, enabling individuals and teams to problem solve and innovate.

One of the strengths of LEGO Serious Play is that it democratizes the process of idea generation and problem-solving, ensuring that every voice is heard. The hands-on, playful nature allows for turn-taking and gives introverts and less dominant team members a comfortable platform to express their ideas. It unlocks a wealth of diverse perspectives and approaches that are essential in tackling complex cyber challenges.

This session is a hands-on workshop allowing opportunity for "individual" LEGO builds and a "shared model" (A model built by a group).

The session will begin with individual models allowing personal insights, reflection and storytelling. The session will then transition to "shared models" leveraging insights, and using them as building blocks to develop collective understanding.

Vanessa Van Beek is a cyber security leader with deep industry experience. She has experience leading multi-disciplinary teams, embedding robust security into digital transformation. Vanessa's background includes Security Operations, Incident Management, Risk Governance and Solution Design. Vanessa is an advocate for continuous learning and knowledge sharing within the cyber security community seeing this as critical to staying ahead of emerging threats. She has 20 years of industry experience, coupled with a Law degree, Master of Business Administration, and a post-graduate diploma in Psychology, which guides her understanding of Technology, Risk, Strategy, and Culture. Her professional qualifications include CISM, CIPM and she is a graduate of the Cyber Leadership Institute and a Certified LEGO Serious Play facilitator. Her experiences have shaped to know crises are inevitable, and preparing to respond requires disciplined operational procedures, responsive technology and a culture of teamwork and

continuous learning. Vanessa was a winner in Australian Women in Security Awards - Cybersecurity Champion and awarded CSO30 leadership award for fostering Security-Conscious culture.

10:30-11:00 Coffee/Tea Break

11:00-12:00 Michelle Sandford, Workshop: "Prompt Engineering with Microsoft", Room 360.1.010

5 years ago the role of Prompt Engineer did not exist, today it is emerging as a key skill that will make the difference between an impressive app and one that cannot be trusted. Learn with Michelle from Microsoft how you can control the AI with the power of your prompts.

Tedx Speaker, developer community mentor, Microsoftie and international conference Speaker, Michelle Sandford lives at the heart of the coding community and helps drive awareness and engagement as a developer advocate and technology evangelist. She advocates for STEM, the Games Industry and Developers. She presents at around 50 Conferences and Events around the world on Technology, Learning to Code, Open Source and Building Bots. She judges hackathons and encourages the next generation into technology careers.

12:00-12:45 Lunch

12:45-14:15 Panel Discussion: Lindsey Duncan – Managing Director, Interfuze, Michelle Sandford - Microsoft, Karen Casella – Chief Nursing and Midwifery Information Officer, North Metropolitan Health Service, Luke McKenna-Engineering Executive Manager, Bankwest, Matt Schneider-Founder of Optika Solutions, Dan Haagman-Founder and CEO Chaleit, Alladean Chidukwani-Senior Cybersecurity Advisor for Bunnings Group. Room 360.3.032

Despoina Giannakaki, Associate Lecturer at the Murdoch School of IT, will moderate.

14:15-15:00 Afternoon Tea

15:00-16:30 CodeCrush Closing Ceremony, Kim Beazley Lecture Theatre

TEACHERS' PROGRAM

Professional Development Workshops will be delivered by Murdoch University Academics, from the School of Information Technology and the School of Media and Communication

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JUNE 04

09:00-10:30 **Eko Pam**, Workshop: "Introduction to Design Thinking", Room 360.4.020

This workshop introduces participants to the fundamentals of Design Thinking as a human-centred, collaborative and iterative approach to tackling complex and wicked problems. Through hands-on activities, reflection and co-design methods, participants learn to reframe challenges, uncover core issues and generate people-focused insights. The session emphasises systems thinking, creativity, and the importance of designing with, not for, communities to create meaningful, sustainable outcomes.

10:30-11:00 Coffee/Tea Break

11:00-12:30 **Keyvan Ansari**, Workshop: "Cyber Hygiene Principles: Keeping your Devices Secure in the Digital Age", Room 460.2.046

In this workshop, we will cover essential cyber hygiene principles to help you keep your personal devices secure. Topics include updating your devices, the importance of regular backups, understanding Multi-Factor Authentication (MFA), using strong passphrases, and recognising common threats like scams and phishing attempts. You'll gain practical tips for navigating the digital landscape safely and effectively, ensuring your personal information stays protected.

12:30-13:15 Lunch

13:15-14:15 Teachers join the students for the Q&A session of the panel discussion, room 360.3.032.

14:15-15:15 Coffee/Tea Break

15:15-16:45 Tael Harper, Workshop: "How to spot the bot: Detecting disinformation in the media", Room 460.2.046

The emergence of AI has led to an increasing proliferation of disinformation in the media. In this workshop we will examine some of the tell tale signs of mis/disinformation and explore some of the ways to detect disinformation. The workshop requires participants to use a range of tools and processes - from information and media literacy to open source intelligence tools - to spot the difference between real and fake media.

16:45-17:30 Break

17:30-20:00 Dinner and Video Games at the Gym/Esports Hub

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JUNE 06

10:30-12:15 Max Frankel, Iterative Gameplay Prototyping workshop, Room 360.4.020

Videogame and tabletop game design share many principles of iterative development: using paper prototyping, participants will get hands on with mechanics design, explore the fundamentals that create compelling gameplay and learn the tools to iterate and refine games effectively.

12:15-12:45 Lunch

12:45-14:15 *Panel Discussion*: Lindsey Duncan – Managing Director, Interfuze, Michelle Sandford - Microsoft, Karen Casella – Chief Nursing and Midwifery Information Officer, North Metropolitan Health Service, Luke McKenna-Engineering Executive Manager, Bankwest, Matt Schneider-Founder of Optika Solutions, Dan Haagman-Founder and CEO Chaleit, Alladean Chidukwani-Senior Cybersecurity Advisor for Bunnings Group. Room 360.3.032

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