



VICTORIAN INDIGENOUS ENGINEERING WINTER SCHOOL

27 SEPTEMBER – 1 OCTOBER 2021

REPORT



We acknowledge the Traditional Owners of the land in which the Victorian Indigenous Engineering Winter School took place, the land of the Wurundjeri, and pay respect to their Elders and families.



Victorian Indigenous Engineering Winter School (VIEWS)

VIEWS, an initiative arising from the 2015 National Indigenous Engineering Summit, is a collaborative venture between the University of Melbourne, RMIT University, Swinburne University and Monash University. Its aim is to provide year 10, 11 and 12 Indigenous students with an immersive experience of engineering and the offerings of the four universities.



Dr Misty Jenkins

VIEWS welcomes Dr Misty Jenkins as the program patron. Misty is a woman of Gundiṯjmara descent who is known for her scientific research into lymphocytes, which can protect against cancer. She is currently a laboratory head at the Walter and Eliza Hall Institute for Medical Research, where she is researching brain cancer and immunotherapy. Misty was the first Indigenous Australian to attend the Universities of Oxford and Cambridge as a postdoctoral research fellow. She is recognised for her advocacy for gender equity, Aboriginal Health and Education. She was proudly born and raised in Ballarat in Victoria.

"I loved participating in the online program as I was able to keep the items sent to me from the program and experiment with them after VIEWS was over. Despite being online, the program was still super interactive and engaging, making it an enjoyable experience online."

VIEWS 2021 Participant

"The VIEWS 2021 program was an extremely engaging program that allowed me to gain a greater insight into a career and pathways into engineering. The activities were super fun and were connected to culture and community, allowing me to make a personal connection with engineering."

VIEWS 2021 Participant



Supporters

The VIEWS Steering Committee would like to express its gratitude to the programs sponsors. Without the continued and generous support of our Industry sponsors, and the sponsorship and collaborative engagement of the four universities, the life-changing VIEWS program would have not been possible.

Sponsors

Gold sponsor:



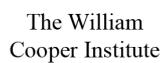
Philanthropic sponsor:



Bronze sponsors:



University Partnerships



VIEWS will keep sponsors updated of the ongoing success of VIEWS participants, who will continue to be supported through the VIEWS alumni network.



Supporters

Patron:	Dr Misty Jenkins
Steering Committee:	
<i>Chair:</i>	Mr Brendon McNiven
<i>University of Melbourne:</i>	Professor Elaine Wong Mr Ross Peek Ms Hope Perkins Ms Michelle Bellino Dr Juliana Kaya Prpic Ms Rula Paterson
<i>Monash University:</i>	Dr Daniel Edgington-Mitchell Ms Theresa Scott
<i>RMIT University:</i>	Dr Matthew Currell Mr Jordan Carter Ngarara Willim Centre
<i>Swinburne University:</i>	Dr Scott Rayburg Ms Lydia Bisett
Sponsors:	Gold Sponsor: Google Bronze Sponsors: ARUP, Nuffield, Qinetiq and SYPAQ Philanthropic Supporter: Boeing
Indigenous Engineer/ STEM Panel Members:	Corey Tutt CEO Deadly Science Katrina Wruck PhD Researcher Industrial Chemistry Ruby Heard Electrical Engineer, Independent Energy Consultant Specialising in Renewable Energy and Microgrids Dr Joseph West – Research Fellow Computing and Information Systems
Indigenous Elders:	Aunty N’arweet Carolyn Briggs Boon Wurrung Senior Elder
Indigenous Mentors:	Jackson Reid, Brittney Andrews, Stephanie Walker, Brittney Henderson, Ethan Savage, Jasper Howell

VIEWES has engaged with Indigenous-owned and majority Indigenous-owned businesses and service providers in establishing the cultural safety in the program. This includes the formal Welcome to Country, program content, resources, catering and program materials.



Chloe Jones Artist
Dungala Creations
Indigenous painting
workshop
(details on page 14)



Mabu Mabu catering

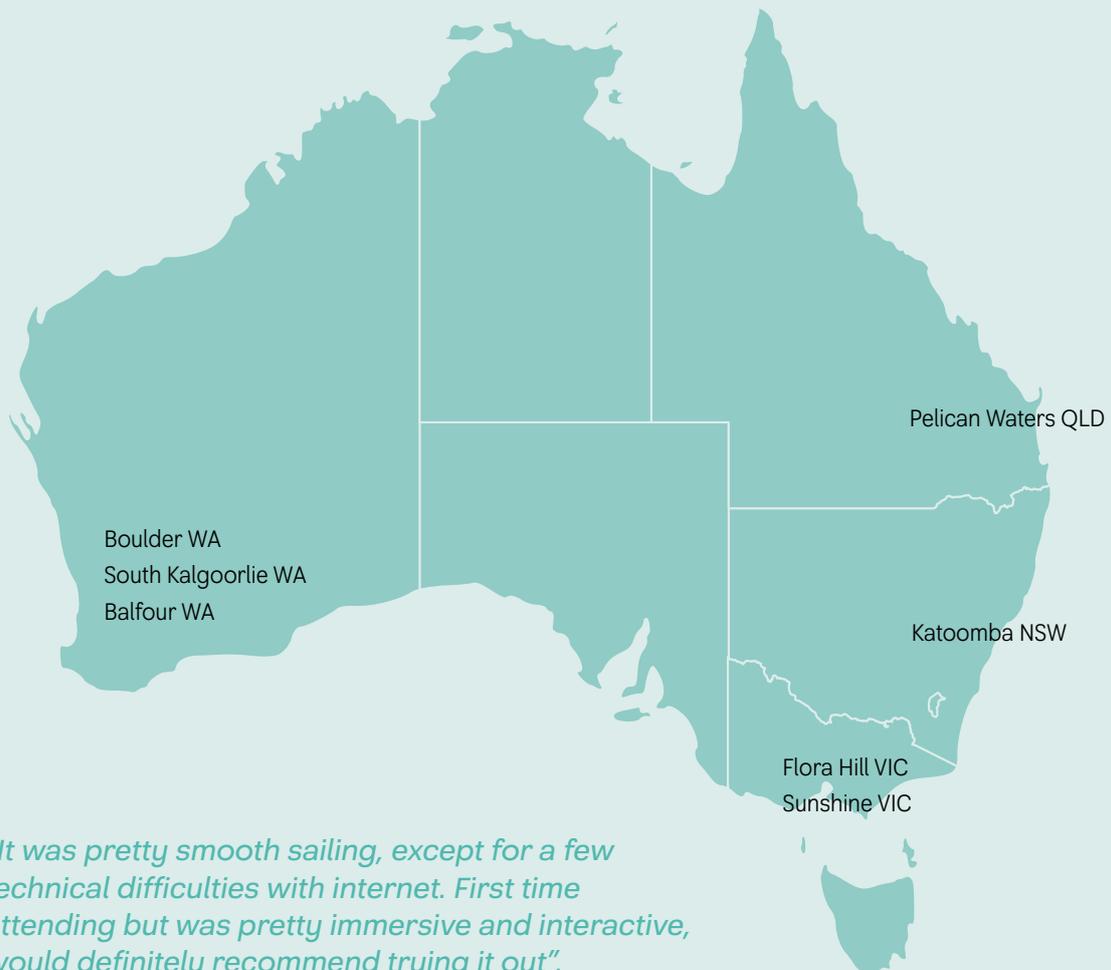


Wayapa Wuurrk
Alana Marsh
Wayapa Practitioner
(details on page 13)

Participants

The VIEWS 2021 participants attended virtually from across Australia, representing schools illustrated in Figure 1.

Figure 1: Australia-wide participation in VIEWS



"It was pretty smooth sailing, except for a few technical difficulties with internet. First time attending but was pretty immersive and interactive, would definitely recommend trying it out".

VIEWS 2021 Participant



Program

Due to the COVID19 pandemic, the VIEWS program was delivered virtually for 2021. Students were provided with kits to participate in online workshops. Students who didn't have access to technology were provided with hardware and connectivity access to enable participation in the online program.

The philosophy underpinning the program is to engage students in five key areas:

1. Explore four universities

An opportunity to explore different university campuses, engineering options and study pathways.

2. Meet Indigenous engineers

VIEWS was designed to offer students the opportunity to meet Indigenous people who had successfully undertaken university study and become engineers.

3. Discover pathways into engineering

In addition to exploring the various pathways offered by the four universities, participants were also able to discover other possible pathways into engineering and real world applications of Engineering.

4. Experience the work of engineers

An important element of the program was the industry visits, which exposed students to the variety and diversity of an engineer's daily work.

5. Cultural activities

An important element of the program is to provide a connection to Indigenous culture.



"VIEWS was a great program, this year completed at home. I enjoyed engaging in a lot of fun engineering activities at home. I can't wait to see how the program evolves in the future."

VIEWS 2021 Mentor



Mentors

Ethan Savage

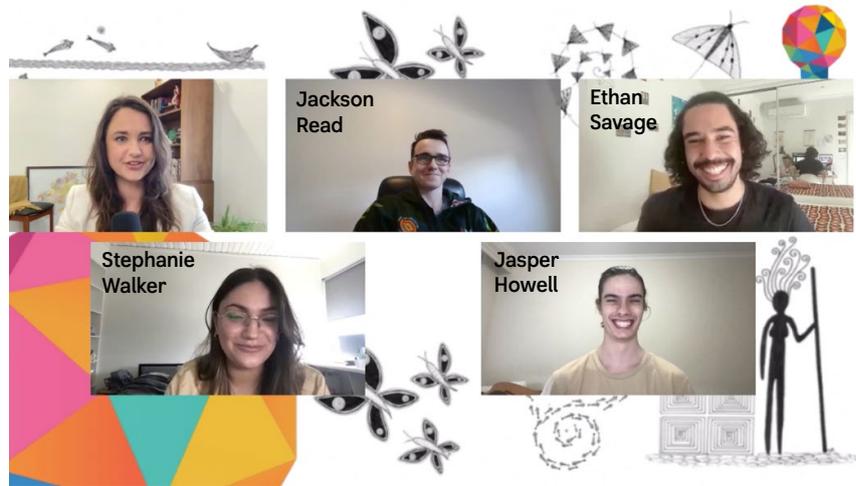
Student, Master of Arts and Cultural Management, University of Melbourne

My name is Ethan Savage, and I am a proud Kaantju, Girramay, and Badu Island person from Far North Queensland. I am currently studying a Master of Arts and Cultural Management at the University of Melbourne, hoping to work with mob within the music industry. I graduated from a Bachelor of Arts in Political Science and Anthropology in 2019, and shortly began full time work in social media regulatory policy. I have been fortunate to be a part of the VIEWS program in the past and other similar programs so I am really excited to be working with the team again, as well as meeting everyone involved this year. VIEWS is a fantastic program, where you learn a lot while having some fun. I hope you enjoy this year's program, and are able to take something away whether that be a new interest or an insight into the really dynamic world of engineering.

Jackson Read

Newcastle Institute of TAFE, NSW

Jackson has over 8 years of experience on a large variety of Civil engineering projects throughout Australia and Internationally. As part of an Indigenous traineeship, he initially undertook a Diploma in Civil Construction Design at the Newcastle Institute of TAFE in NSW whilst working in both Newcastle and Sydney Offices. Jackson later moved to Perth WA to assist the drafting and standardisation of several projects teams working on the Great Northern Highway project. After winning a national product design award he was invited to Melbourne VIC to upskill with a part time Bachelors of Product Design Engineering. The degree has since been paused to focus on high valued projects both locally and Internationally. Currently, Jackson leads the CAD and BIM components of the urban development teams in Melbourne and Sydney. His passion for automation and quality assurance continues to drive him to pursue more effective synergistic and design centric workflows.



Jasper Howell

Student, Bachelor of Science, University of Melbourne

My name is Jasper Howell, I'm an Awabakal man from Sydney. I am currently studying a bachelor of science majoring in physiology at the University of Melbourne, with plans to study animal handling at the Taronga Zoo Training Institute later this year. When I graduated high school, I travelled to America with plans to attend the University of California Los Angeles as a student athlete, playing basketball. Sadly, injury held me back, and I began my study in Australia. Through my studies I have discovered my desire to learn about the muscular system and how to repair it. I have been lucky enough to work in hospitals as a physiotherapist, whilst being able to travel the country as a professional athlete in the NBL. I have been lucky enough to study whilst also representing my country in the FIBA World Cup and youth Olympics. I am excited to join the VIEWS program for a second time, and through this program I hope to help inspire young students to undertake university study in a field that intrigues them, and enables them to make a positive impact.

Stephanie Walker

Student, Bachelor of Science, University of Melbourne

My name is Stephanie Walker, and I am a proud Yorta Yorta, Kuku-Yalanji, Girramay woman from Victoria. I am currently studying a Bachelor of Science at the University of Melbourne, majoring in Geography. My studies have led me down a pathway that aims to learn about and understand ways in which human behaviour impacts the environment. Throughout my work with the university I have had the opportunity to be apart of different outreach programs, that aim to engage young Indigenous people in STEM. This year, I am excited to be apart of the VIEWS program again. I hope the 'Caring for Country' workshop encourages participants to recognise how important Indigenous knowledge is in the STEM industry, and how vital Indigenous perspectives on land management are for helping solve the world's environmental problems.

"VIEWS 2021 was a fantastic program that adapted to the significant challenges of the pandemic, delivering students a well-rounded insight into the world of engineering. Further, as a mentor it was empowering to have so many students involved even on a virtual platform."

VIEWS 2021 Mentor



Program timetable

MONDAY 27 SEPTEMBER - RMIT		
TIME	ACTIVITY	PRESENTERS / REQUIREMENTS
11:00am - 11:30am	Welcome to Country & VIEWS Program Introduction	Hope Perkins & Michelle Berlino
11:30am - 12:15pm	RMIT Team Introduction & Ice Breaker Activity	Matt Currell, Will Sullivan, Jordan Carter, Al Ficker, Clint Hansen & Peter Stasinopouloss
12:15pm - 12:45pm	Lunch Break	
12:45pm - 2:00pm	Practical Activity: Building an Electric Car	Kate Fox Car components provided in student kits
2:00pm - 2:10pm	Program Break	
2:10pm - 2:50pm	Pathways Into & Through an Engineering Career	Jordan Carter & Clint Hansen
2:50pm - 3:00pm	Afternoon Break	
3:00pm - 4:00pm	Indigenous Aquaculture (Bumj Bum), Fish Trap Design & Yarning Circles	Matt Currell, Will Sullivan, Jordan Carter, Al Ficker, Clint Hansen & Peter Stasinopoulos

TUESDAY 28 SEPTEMBER - UNIVERSITY OF MELBOURNE		
TIME	ACTIVITY	PRESENTERS / REQUIREMENTS
11:00am - 11:30am	Murrup Barak Virtual Visit	Olivia Williams & Jasmine Thompson
11:30am - 12:30pm	Caring for Country - Activity 1	Stephanie Walker, Colin Scholes & Simone Hendrikse Components provided in student kits
12:30pm - 1:30pm	Lunch Break	
1:30pm - 3:00pm	VIEWS Olympics - Activity 2	Elaine Wong, Renata Boravica-Gajic, Adriano Augusto, Filip Surla, James Mao
3:00pm - 3:30pm	Yarning Circles & Trivia	Stephanie Walker, Jackson Read, Jasper Howell & Ethan Savage

"I've enjoyed both in person and virtual programs and have enjoyed both. I found it difficult to engage online however. But in person I found it easy to be close to the students and help them with what they want in regards to uni."

VIEWS 2021 Mentor



Program timetable

WEDNESDAY 29 SEPTEMBER - SWINBURNE UNIVERSITY		
TIME	ACTIVITY	PRESENTERS / REQUIREMENTS
11:00am - 12:00pm	Swinburne Welcome & Ecological Footprints Introduction	Lydia Bissett, Scott Rayburg, Yemurraki Egan & Max Jones
12:00pm - 12:30pm	Lunch Break	
12:30pm - 1:30pm	Practical Activity 1: Turing Tumble Online Simulator	Turing Tumble provided in student kits
1:30pm - 2:00pm	Wayapa	Alana Marsh
2:00pm - 3:00pm	Practical Activity 2: Turing Tumble Online Simulator	Turing Tumble provided in student kits
3:00pm - 4:00pm	Yarning Circles	Stephanie Walker, Jackson Read, Jasper Howell & Ethan Savage

THURSDAY 30 SEPTEMBER - MONASH UNIVERSITY		
TIME	ACTIVITY	PRESENTERS / REQUIREMENTS
11:00am - 12:00pm	Welcome & Rocket Activity Introduction	Allira Jones & Daniel Edgington-Mitchell
12:00pm - 12:30pm	Indigenous Painting Workshop	Chloe Jones
12:30pm - 1:00pm	Lunch Break	
1:00pm - 3:00pm	High Powered Rocket (MHPR) Launch & Debrief	Allira Jones, Daniel Edgington-Mitchell & MHPR Team Members
3:00pm - 3:30pm	Yarning Circles	Stephanie Walker, Jackson Read, Jasper Howell & Ethan Savage

THURSDAY 30 SEPTEMBER - MONASH UNIVERSITY		
TIME	ACTIVITY	PRESENTERS / REQUIREMENTS
11:00am - 1:00pm	Sustainable Energy - ARUP Workshop	Alex Reilly, Jonathan Anderson, Nick, Adams, Shirin Cormaty & Sian Harrick
1:00pm - 1:30pm	Program Break	
1:30pm - 3:30pm	IEWS 2021 Celebration Lunch	Rae Johnston, Hope Perkins, Dr Misty Jenkins, Corey Tutt, Joseph West, Katrina Wruck & Ruby Heard
3:30pm - 4:00pm	Meet & Greet	IEWS Mentors, Sponsors & Industry Personnel

DAY 1 – RMIT University



Aleryk Fricker

Lecturer, School of Education, RMIT University

Al is a proud Dja Dja Wurrung man and is currently a lecturer in the School of Education at RMIT University. He is a former Primary and Secondary school teacher, and his current research focus is on decolonising education in Australia. He has a passion for learning and teaching and improving outcomes for First Nations students in the Australian school system. He has a rudimentary understanding of Engineering and looks forward to learning from the deadly students participating in VIEWS.



Clint Hansen

Indigenous Pre-Doctoral Research Fellow, Chemical & Environmental Engineering, RMIT University

Clint Hansen is currently the Indigenous Pre-Doctoral Research Fellow, Chemical & Environmental Engineering at RMIT University. He has over 8 years experience as a qualified Fitter Machinist working on the likes of 888 Red Bull racing through to elite top fuel Drag engines. Clint has well developed project management skills and well developed technical skills in research and materials testing and demonstrated experience in project management. He is also currently undertaking a clean water solution project for remote communities in Western Australia.



Jordan Carter

Ngarara Willim Indigenous Outreach Coordinator, RMIT University

I have completed studying a Bachelor of chemical engineering at Monash University. I am passionate about Project management and I am currently employed at RMIT University. I am an experienced Project Manager with a demonstrated history of working in the oil & energy industry. My goals are to develop my technical skills in the field of project management and construction. Skilled in Problem Analysis, Analytical Skills, HAZOP Study, Organizational Leadership, and Interpersonal Skills. Strong program and project management professional focussed on design and commissioning.



Kate Fox

Associate Professor (Biomedical Engineering) & Associate Dean HDR, RMIT University

Kate Fox is an Associate Professor in the School of Electrical and Biomedical Engineering. Her research is focused on developing diamond as an orthopaedic biomaterial. Kate is a biomedical engineer with significant experience and expertise in hydroxyapatite coatings and implant design for orthopaedic applications. She has experience in hybrid material design, surface science characterisation techniques and implants. Prior to joining RMIT, she was part of the Bionic Eye Project working to develop a high acuity diamond electrode capable of electrically stimulating retinal tissue.



Matthew Currell

Associate Professor, Program Manager (Environmental Engineering), RMIT University

Matt teaches hydrology and geology to environmental and civil engineering students, and conducts applied research in hydrogeology, focussing on the impacts of human activities on groundwater flow and quality, and the relationships between people, water, culture, environment and health.



Peter Stasinopoulos

Senior Lecturer, RMIT University

Peter is a member of the RMIT Intelligent Transport Systems research group and a research fellow of The Natural Edge Project. Peters interests include Systems optimisation, Resource productivity, System dynamics, Life cycle assessment, Design for sustainability, Systems engineering and Intelligent transport systems.



William Sullivan

STEM Engagement Coordinator, RMIT University

Will Sullivan works as the STEM Engagement Coordinator at RMIT University, providing workshops and STEM experiences for Victorian High Schools. He has a background in the chemistry of food having a completed a PhD that researched how different starches form crystals in breadmaking. In his spare time Will likes playing with new sourdough recipes and training for long distance runs.

DAY 2 – University of Melbourne



Adriano Augusto

Associate Lecturer, School of Computing and Information Systems, University of Melbourne

Adriano Augusto is associate lecturer at the school of Computing and Information Systems (CIS) of the University of Melbourne. He completed a joint PhD at the University of Tartu (Estonia) and the University of Melbourne, presenting a thesis in the field of automated process discovery. His research interests include: process mining, automated process discovery, and business process management.



Colin Scholes

Associate Professor, Chemical Engineering, University of Melbourne

Assoc. Prof. Colin Scholes is the head of the Scholes Research Group at the University of Melbourne. His research is focused on developing solutions in the clean energy and future fuels sector, including developing novel separation processes involving membranes and assisting industry's undertake carbon emission abatement. This research is primarily achieved by working with industry partners on technology development. Assoc. Prof. Scholes's goal is to implement technology solutions in Australia and international industry that will facilitate the transition to a clean energy future, reduce CO₂ emissions and decrease the energy intensity of industry. Assoc. Prof. Scholes research also has a strong materials engineering component, focused on working with Indigenous communities on engineering-based programs that reestablished lost knowledge and practices.



Elaine Wong

Associate Dean and Professor, University of Melbourne

Elaine Wong received her PhD (2002) degree in Electrical Engineering from the University of Melbourne, Australia. She is currently an Associate Dean and Professor with the Melbourne School of Engineering. Her current research interests include low-latency communication networks and prescriptive analytics to facilitate human-to-machine applications over the Tactile Internet. She has co-authored 4 book chapters, 75 refereed international journals, 152 refereed international conferences (40 invited international conference publications) and 5 patents. Elaine has previously served as Associate Editor of the IEEE/OSA Journal of Optical Communications and Networking, IEEE/OSA Journal of Lightwave Technology, and OSA Journal of Optical Networking. She currently serves on the ECOC Technical Program Committee and the OFC Technical Program Committee.



Hope Perkins

Indigenous Engagement Coordinator, Faculty of Engineering and Information Technology
VIEWS Program Lead

Hope has been the Program Lead for VIEWS since its beginning 7 years ago and is passionate about educational outcomes for Indigenous students. "I love being able to work with brilliant and curious minds both teachers and students in the world of engineering and Information Technology. There are so many challenges the globe faces and engineering and technology will be at the forefront of addressing these challenges. It's such an exciting place to be."



Filip Surla

Mechanical Engineer, Qinetiq

Filip completed a Bachelor of Mechanical Engineering with honours at Monash University in 2020. During his time at university he was extensively involved in the Monash Motorsport FSAE team, culminating in heading the team in a chief electric engineer role in 2017. Before finishing his studies Filip worked full time for the university to design and commission a range of student makerspaces including the Monash Makerspace on the Clayton campus. In 2020 he began a full time role as an engineer with QinetiQ to develop and deliver the service in the Telstra Creator Space for the University of Melbourne. He works with the team to help enable a new generation of engineering students to learn and apply hands-on skills to their university projects.



James Mao

Cloud Consultant, Google

James Mao works at Google as a Cloud Consultant based in Melbourne, Australia. He has a strong interest in engineering and information technology and spends most of his time building and supporting others with technological solutions. In recent years, he has focused on designing digital infrastructure, security and data solutions that can reach a massive scale, leveraging on the fundamental engineering principles. James stays updated with the latest developments in engineering including electric vehicles and autonomous driving. He is also learning to become a private pilot.

DAY 2 – University of Melbourne



Michelle Bellino

Manager, Student Experience,
University of Melbourne

Michelle Bellino is Manager, Student Experience at the Faculty of Engineering and Information Technology of the University of Melbourne. Michelle has been committed to over 15 years leading the student experience and experiential learning opportunities for the University of Melbourne. Michelle has been delivering the Victorian Indigenous Engineering Winter School program since 2016 and is passionate in providing students insights into what it's like to study and work in engineering and information technology.



Murrup Barak

Jasmine Thompson & Tyrina Gartsone

Murrup Barak, Melbourne Institute for Indigenous Development takes its name from the Woiwurrung language. 'Murrup Barak' means the Spirit of Barak. The name was chosen to honour the memory of the visionary Aboriginal leader William Barak. The name reflects our respect for Indigenous cultures and knowledge and our vision for an Institute that makes an enduring contribution to Indigenous Australia through the transformative impact of education and employment in the context of Australia's leading University in teaching, learning, research and employability.



Renata Borovica-Gajic

Lecturer in Data Analysis, School of
Computing and Information Systems,
University of Melbourne

Renata Borovica-Gajic holds a position of Lecturer in Data Analytics in the School of Computing and Information Systems at The University of Melbourne. Dr Borovica-Gajic received her PhD degree in Computer Science from Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland in 2016. During her studies she worked in the Data-Intensive Applications and Systems Laboratory (DIAS), supervised by Prof. Anastasia Ailamaki. Prior to joining EPFL, she worked in industry for 5 years as a senior member of the database team of a power engineering company. Renata's research focuses on solving data management problems, when storing, accessing and processing massive data sets, enabling faster, more predictable, and cheaper data analysis as a result. She builds self-driving database systems that are able to automatically adjust data retrieval and query processing strategies to fit the properties of data, hardware and usage patterns. She is also interested in the topics of scientific data management, big data exploration, query optimisation, physical database design, and hardware-software co-design.



Ross Peek

Indigenous Engineering & IT Unit,
University of Melbourne

A senior Indigenous (Yawuru) professional (MBA B.Eng) with 13+ years' experience in the resource, transport and education sectors. Extensive experience in managing complex, high-value strategic improvement initiatives. Customer & service oriented, and passionate about improving the effectiveness of organisations.



Simone Hendrikse

McKenzie Fellow, Chemical
Engineering, University of Melbourne

Dr Simone Hendrikse is currently a McKenzie Postdoctoral Fellow in the group of Prof Amanda Ellis and Prof Sally Gras, a prestigious fellowship from the University of Melbourne (3 years fully funded, only 10 given yearly university-wide), where she aims to build an artificial molecular highway to investigate cell-cell trafficking and communication. Her research is focused on DNA Nanomaterials to investigate cell-cell communication, and biomaterials for organoid culture.

DAY 3 – Swinburne University



Lydia Bissett

Indigenous Student Recruitment Officer, Swinburne University

Lydia is a proud trawlulwuy woman from Tasmania. She has lived and worked on Wurundjeri land in Victoria for nine years. Lydia is the Indigenous Student Recruitment Officer in the Moondani Toombadool Centre at Swinburne. She has worked at Swinburne for the past four years and is also a student, studying a Bachelor of Psychological Sciences.



Melissa Eaves

Senior Lecturer, RMIT University

Dr Melissa (Mel) Neave is an environmental geographer with experience in natural resource management and a particular interest in water resources. She teaches in the undergraduate and postgraduate Environment and Planning program at RMIT.



Wayapa Wuurrk - Alana Marsh

Wayapa Practitioner

Alana is a Meriam woman who has experienced great joy sharing Wayapa for nearly five years. She is excited to connect with you! Wayapa is a species centred wellness modality that connects us back to the Earth using 14 readily recognised elements and a movement sequence as a narrative expression of those elements. Drawing on First Nations wisdoms the globe over, we understand the Earth as the enabling platform for individual and collective mind, body, spirit wellbeing.



Max Jones

Civil Engineering Student, Swinburne University

G'day, I'm Max. I'm 22, and am currently in my final year of University, studying civil engineering at Swinburne. I have also just started working at Coleman Rail, and am working as a procurement engineer on the Level Crossing Removal Project along the Frankston Line. Outside of engineering, I play a lot of ultimate frisbee, and am a passionate Collingwood supporter.



Scott Rayburg

Senior Lecturer, Civil and Construction Engineering, Swinburne University

Dr Scott Rayburg is a fluvial geomorphologist and hydrologist with expertise in catchment management, environmental flows, hydrologic and hydraulic modelling, GIS, remote sensing and data analysis. Scott predominantly works in semi-arid environments and on rivers, lakes and wetlands. Scott's research focuses on diversity and complexity in physical systems and on applying multidisciplinary approaches (including physical, biological and social aspects) to solving scientific and natural resource management problems.



DAY 4 – Monash University



Allira Jones

**Indigenous Student Recruitment
Coordinator with the William Cooper
Institute**

My name is Allira Jones and I am a proud Yorta Yorta woman from the Nicholls, Atkinson and Charles bloodlines. I was born and raised on country, across the Shepparton and Mooroopna region. I am a La Trobe University and Monash University alumna, having completed a Bachelor of Psychological Science and a Graduate Diploma of Psychology Advanced. I am passionate about education and creating a safe space for our mob in the higher education sector. This has led me to my current role as the Indigenous Student Recruitment Coordinator with the William Cooper Institute, promoting the educational opportunities available at Monash University.



Chloe Jones

Artist

I am a proud Yorta Yorta woman born and raised on Yorta Yorta Country around the Mooroopna and Shepparton region. I come from a background of leaders and a rich family history with direct relations to indigenous leader's uncle Douglas Nichols and Nora Charles (grandmother). I'm a creative and business owner. I've always had a passion for art and design and using my creative abilities. When I graduated from year 12 VCE in 2018 I then pursued further studies in Business which led to the launch of my own business 'Dungala Creations'. This platform gives me the freedom to do what I love and express my passion for my culture with other creatives and my communities. I hope to inspire others and educate the wider communities about Indigenous Art and the significant importance it has in my culture.



Daniel Edgington-Mitchell

**Senior Lecturer, Department
of Mechanical and Aerospace
Engineering, Monash University**

Dr. Daniel Edgington-Mitchell received his undergraduate degrees in Mechanical and Aerospace Engineering from Monash University in 2005. During his PhD, he undertook graduate research in the High Temperature Gas Dynamics Laboratory at Stanford University under the auspices of a Fulbright Fellowship between 2008-2009. He was awarded his PhD from Monash University in 2013. He now works as a senior lecturer in the Department of Mechanical and Aerospace Engineering at Monash University, where he is Course Director for Aerospace Engineering, and the Faculty Chair for Equity, Diversity and Inclusivity.



High Powered Rocketry Team

High Powered Rocketry Team Lead

Monash HPR (High Powered Rocketry) is a student team dedicated to the design, analysis and construction of high-powered rockets. Formed in conjunction with the Australian Youth Aerospace Association's announcement of the inaugural Australian Universities Rocket Competition (AURC), Monash HPR designs and constructs high-powered rockets to compete in the 10,000 and 30,000ft categories. This year we have the opportunity to compete virtually* in the international rocketry competition, the Spaceport America Cup, where we will be entering our 10,000 ft rocket.

DAY 5 – Industry & Celebration Presentation



Corey Tutt

CEO, Deadly Science

Corey Tutt is the CEO of Deadly Science. He is also Media and communications advisory group member at ARC Centre of Excellence for Electromaterials Science. Corey received the Young Australian of the year NSW award in 2020.



Katrina Wruck

PhD Researcher, Industrial Chemistry

Katrina is a PhD researcher, science communicator and advocate for Indigenous people's inclusion in STEM. Katrina's research is cross-disciplinary, encompassing knowledge from the fields of industrial chemistry, process engineering and materials science to deliver high-tech, innovative solutions in wastewater treatment. She has proven experience and a diverse skill set in technical ability, project management, leadership, data analysis, problem solving, communication & engagement.

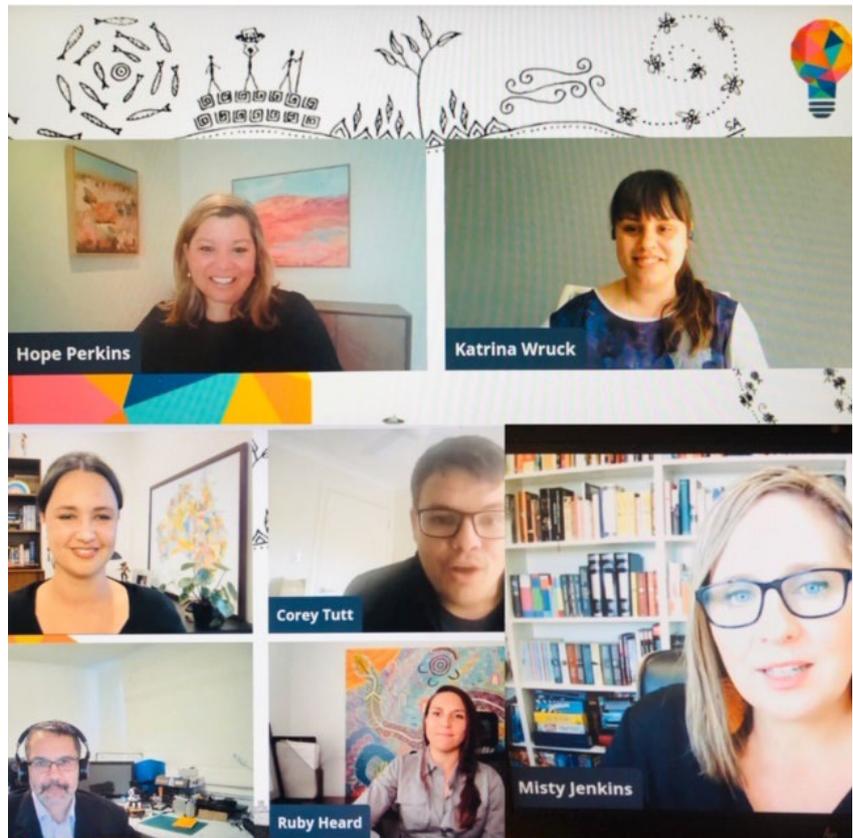
She is an active member of the community being an advocate for programs that foster positive outcomes for students such as mentor for the CSIRO Young Indigenous Women's STEM Academy and involvement as postgraduate representative in the QUT Research Degrees Committee and STEM Vacation Research Experience Scheme. Her work in various school outreach programs aims to increase the engagement of Young Australians in STEM disciplines and raise aspirations for them to pursue tertiary studies.



Dr Joseph West

Research Fellow, Computing and Information Systems, University of Melbourne

Joe's research interest is in Machine Learning and Artificial Intelligence with a focus on general decision making and general applications. He is investigating deep learning approaches for neurological stimulation therapies covering Deep Brain Stimulation (DBS) and Spinal Cord Stimulation (SCS). He is using state of the art deep learning methods to close the loop in neuro-stimulation, improving outcomes for patients undergoing neurological electro-stimulation therapy.



DAY 5 – Industry & Celebration Presentation



Misty Jenkins

Laboratory Head, Walter and Eliza Hall Institute for Medical Research

Misty is a woman of Gunditjmara descent who is known for her scientific research into lymphocytes, which can protect against cancer. She is currently a laboratory head at the Walter and Eliza Hall Institute for Medical Research, where she is researching brain cancer and immunotherapy. Misty was the first Indigenous Australian to attend the Universities of Oxford and Cambridge as a postdoctoral research fellow. She is recognised for her advocacy for gender equity, Aboriginal Health and Education. She was proudly born and raised in Ballarat in Victoria.



Ruby Heard

Independent Energy Consultant, Specialising in Renewable Energy & Microgrids

I am an electrical engineer and energy consultant. After spending the first 7 years of my career with Arup working in both Australia and the US I have moved to independent consulting to focus more on remote, off-grid applications. I recently spent 6 months volunteering for Engineers Without Borders (EWB) and working with UNHCR as support for their energy team in Ethiopia. I conducted training via theoretical and practical methods to teach refugee energy co-operatives how to design, build and maintain solar + battery storage mini-grids. My previous experience in building services electrical design, lighting, ESD, DC buildings, medium voltage distribution and large scale solar system/microgrid feasibility and design gives me a well rounded background in the energy and power industry.



Rae Johnston

Science & Technology Editor, NITV, SBS

Rae Johnston is a multi-award-winning journalist. The first Science & Technology Editor for NITV at SBS, her work appears across television, radio, podcasts and online. Rae is also the producer and host of top-rated podcasts Queens of the Drone Age, Hear+Beyond and Take It Blak. Previously, Rae was the first female editor of Gizmodo Australia, and the first Indigenous editor of Junkee. A leading commentator on all things technology, science and pop culture, Rae has worked with every major television and radio network in Australia at some stage of her decade-long career. Today, she makes regular appearances across SBS, ABC and Network Ten.



DAY 5 – Industry & Celebration Presentation

ARUP

ARUP

Arup is an independent firm of designers, planners, engineers, architects, consultants and technical specialists, working across every aspect of today's built environment. Arup's founding commitment to do socially useful work continues to shape our commercial work today and forms the beating heart of our investment in community engagement.

The program aims to solve problems at the intersection of equality, education and employment and the provision of basic infrastructure that provides the essentials for life such as water, sanitation, energy, food security and shelter. We gear our community engagement towards supporting the most marginalised and disadvantaged people and to play an important part in our firm-wide contribution to the global Sustainable Development Goals (SDGs).

During this workshop, you will hear from:

Nick Adams, Associate Principal
(Buildings)

Sian Harrick, Engineer (Environment
& Resources)

Jonathan Anderson, Senior Engineer
(Environment & Resources)

Shirin Cormaty, Engineer (Buildings)

Priyani Madan, Engineer (Environment
& Resources)

Timothy Bowker, Engineer (Buildings)

“My highlight was presenting the sustainable energy business pitch to Arup and winning for my group. I also loved the Turing Tumble activity.”

VIEWS 2021 Participant

