SEAWEED OF OPPORTUNITY
The next-gen plastics that could save our oceans

BATTLE OF THE BOTS
How robots are helping students get a head-start in their careers

THE LAW OF CONSENT
Why many ‘grey’ areas of sexual consent really aren’t that grey
You were recently re-appointed as Vice-Chancellor of UTS until 2024. What is it about UTS that makes you want to stay?

Well, first of all, I was absolutely stoked. It’s such an honour and a privilege to be able to continue to work at UTS. But, as far as what makes me want to stay, it’s exactly the same three reasons why I joined UTS to begin with.

The first is UTS itself – the values, the aspirations, the feel of the place. Everyone genuinely comes to work, every day, to make the world a better place. To have the privilege of working in an organisation like that, it’s just awesome.

The second is the people. I have, all through my career, been very careful who I choose to work with. It’s such an honour and a privilege to be able to continue to work at UTS. But, as far as what makes me want to stay, it’s exactly the same three reasons why I joined UTS to begin with.

The third, and this is important, is the potential UTS has. We’re currently celebrating 30 years. We’ve come an incredibly long way, but the potential we have to do even more amazing things, is quite profound.

You’ve been described as the driving force behind a grand reading room in UTS Central. What was your inspiration, and why is a reading room important?

‘Driving force’ might be a bit strong, but it’s certainly something that I’m interested in. If you look through all of the great universities, all the places of learning right through the centuries, a reading room is always at the heart.

It’s a place where students and staff can take a break. With technology, and everything else, spinning around us, a reading room is a place where you can sit down, reflect, work by yourself, and be inspired to have the big thoughts that can make true transformations. And, I think when people see the reading room, they’ll be blown away by how much it captures the heart of what it is to be a dynamic, young university.

What are you most looking forward to in 2019?

2019 is going to be a very exciting year! A lot of that’s actually related to the UTS 2027 strategy.

But, we’ve also been doing a lot of work on our postgraduate education – how we support students all the way through their lifetime is becoming increasingly important.

There have been lots of conversations at the university, as we’ve developed our strategy, about how we not only support our graduates, but everybody in the workplace. All the faculties have come up with these really creative plans for how they engage with people in the workplace through micro-courses. And, that’s going to start kicking in next year. I’m looking forward to seeing how that unfolds.

This year, UTS celebrates its 30th anniversary. What had you achieved by the time you were 30 years old?

Thinking back, I was working at the CSIRO. It was actually a really exciting time because at that point, the CSIRO had kind of been forgotten about by the government.

So, we were working on how we make the CSIRO relevant to the government and the Australian people. We had all these conversations with stakeholder groups, the community, the government, to say, ‘What are the biggest challenges facing us as a nation?’ Now, that was pretty cool! And, being 30, the audaciousness of some of the goals that were being set out didn’t worry me because I was young and enthusiastic. It was great!
Battle of the bots
Step inside Mechatronics 2 to discover how engineering students are achieving epic bragging rights and a head-start in their careers.

The law of consent
We break down the legal jargon to explain why many of the ‘grey’ areas of sexual consent really aren’t that grey at all.

Cover: Seaweed of opportunity
Find out how next-generation bioplastics, made from seaweed, could decrease pollution, increase biodiversity and improve the lives of people living on the coast.

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Art & U: UTS art collection

Next issue
This is the final issue of U magazine for 2018.

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Here’s looking at U

For 37 years, UTS’s staff magazines have captured who we are and what it means to work at UTS. Take a look back to see what’s changed, what hasn’t and where we’re headed next.

1981
Seven Days launched. Originally an A4, two-page, black and white, weekly newsletter, Seven Days included staff notices, new staff appointments, policy statements and events.

1988
UTS founded.

1990
The design of Seven Days is updated to include coloured mastheads and some black-and-white photography.

1991
Seven Days closes to make way for a more human-focused university publication, but the first two issues went unnamed.

1992
In early 1992, staff were invited to share their ideas for naming the magazine (via fax or internal mail!) with the winner receiving a buffet lunch for two at the Golden Gate Park Plaza International.

1992
The first issue of Anchor is printed in March.

1998
In November, Anchor and Alumnews combine to form the fortnightly UTS News – a predominantly black-and-white, broadsheet, magazine-style publication for the entire university community.
2000
A spot colour, most often red, is introduced to the cover and pages of UTS News. More feature articles begin to be included in the magazine.

2004
U: launches. It was (originally) a full-colour, glossy, broadsheet magazine published eight times each year. The articles inside U: aimed to set the culture at UTS, and to provoke and inform discussion. Early editions even featured a ‘caption this’ competition on the back cover.

2008
U: undergoes a re-design, shrinking to an almost-A4 size and being printed on recycled paper. Articles in the magazine shift to show a ‘slice of UTS life’ and include regular categories like research, learning & teaching, opinion, featured event and profiles.

2010
U: launches its first Research Special Issue.

2011
U: launches its first Teaching & Learning Special Issue, bumping the total number of issues up to 10 per year.

2014
The Research and Teaching & Learning Special Issues replace the June and September issues of U: magazine bringing the total number of editions published each year back to eight.

2017
Following the university’s brand refresh, U: dropped the colon to become U magazine. The design was also updated to feature more white space and photography.

2019
Stay tuned! Next year, there’ll be even more changes afoot. Until then, you can tell us what you like and what you don’t by emailing u@uts.edu.au

FIONA LIVY
Marketing and Communication Unit
Battle of the bots

65 students. 13 robots. One head-to-head battle. Step inside Mechatronics 2 and uncover how engineering students are achieving epic bragging rights (sometimes on an international scale) and a head-start in their careers, too.

Ask Sarath Kodagoda what the atmosphere is like in his Mechatronics 2 class and he’ll give you an unexpected answer.

“Very noisy,” he laughs. “People are joking, they are arguing with each other, proposing and debating new solutions to the problem. It’s a really nice, very warm atmosphere.”

It’s not your average tutorial, for sure. But, while it might sound like chaos, Sarath’s students are actually deep into a project that could see them competing against other roboticists on an international stage.

In small groups, these undergraduates are building autonomous robots able to navigate a diabolical maze of Sarath’s creation, with plenty of twists and turns, and some infrared curtains thrown in for good measure.

Having worked in robotics for more than two decades, Sarath, who is an Associate Professor and Deputy Director (Teaching and Research Integration) at the Centre for Autonomous Systems, has always had a strong passion for the field. But when he took over as program coordinator for the undergraduate mechatronics course, the way classes were being taught left him cold.

“Traditional lectures and labs were not inspiring anybody. The students don’t have the opportunity to think. They don’t have time to innovate,” he explains.

Looking for a way to give his students a real-life experience that could advance their learning, he hit upon the idea of running a robotics competition in his own class. After all, he thought, the only thing better than getting to build a robot in class is getting to build a robot in class that can beat your friends’!

Working in small teams, students in Mechatronics 2 learn how to use micro-controllers, work with actuators and sensors, and do the complex programming required to make their robots autonomous. And, while getting a robot through a maze may sound simple, Sarath adds new challenges each semester to test the students’ creativity.
In small groups, these undergraduates are building autonomous robots able to navigate a diabolical maze of Sarath’s creation.

“That’s one of the other great things,” adds Sarath. “I haven’t seen two teams in any class have the same solution. Each and every team comes with their own solutions.”

What’s more, the students’ passion for robotics, ignited by the competition, extends well beyond the boundaries of the classroom. For example, the winners of the in-class competition are given the opportunity to compete in the National Instruments Autonomous Robotics Challenge, which features competitors from Australia, Malaysia, Singapore and New Zealand.

Some students have even taken it upon themselves to enter external competitions, establish a robotics society (RobUTS) and facilitate workshops across year groups.

“The students are now self-motivated to do their own projects. They are basically inspired by themselves and they are growing as life-long learners. That’s what I’m really proud of,” he says.

The project-based approach Sarath has taken deliberately mirrors reality. Every week, Sarath and his colleagues at CAS are working with industry to solve real-life problems, like a robot that can crawl inside dirty, corrosive sewer pipes so water utilities can assess their condition before they collapse.

Sarath says, a collaborative approach, and utilising a range of skills and backgrounds is essential to creating innovative and effective solutions. And, by equipping students with these collaborative and problem-solving skills, Sarath’s helping them build technology that will make a real difference.

“They’re joining us as part of capstone projects, internships, or projects in other subjects. It is not only that they are learning, they are producing some tangible outcomes,” he notes.

Engineering student Rodrigo Perez Caldelas agrees Mechatronics 2 is unlike any other class he’s taken.

“It’s such a special unit because it gives you the tools to start creating advanced projects and gives you an insight into the future applications robotics can have,” explains Rodrigo. “The subject doesn’t give you any methods to solve the tasks required, so you actually learn a lot more. Creativity and dedication are fundamental pillars for engineers, so I know Sarath’s class has given me an edge over other engineers.”

The transformation of Mechatronics 2 was recently recognised at the Vice-Chancellor’s Awards for Research Excellence, where Sarath came away with the prestigious UTS Medal for Research and Teaching Integration.

He is now bringing his active, project-based approach to the rest of his classes.

The faculty is also looking at using new spaces and studios across units so students can learn and work together in groups, interact with staff as mentors and do more impactful work.

Overall, though, Sarath is focused on ensuring all of his students are ready to take on whatever the future holds.

“The technology is going at an extremely fast rate. It’s not about today’s job market, what we have to be thinking about is what is happening in the future. We have to basically prepare ourselves and prepare our students so that they can face the challenges of the future.”

MAX HALDEN
Marketing and Communication Unit

Photographer: Shane Lo
The law of consent

Consent needs to be continuing and it can be withdrawn at any time, for any reason

The law of sexual assault is vitally important. Community understandings of consent, however, aren’t always clear. Law Lecturer Katherine Fallah breaks down the legal jargon to explain why the ‘grey’ areas really aren’t that grey at all.

Every time I teach the law of sexual assault, I brace myself. I teach a lot of tough and gory material: war crimes, genocide, torture, murder. But, as a lecturer who habitually makes the effort to read the room, I’m always struck by how many of my students are personally invested in what I have to teach them about the law of sexual assault.

The wide eyes, the furrowed brows, the shuffling in seats and the insistent, sophisticated requests for clarification: these can’t all be symptoms of my students’ discomfort with the sudden shift to explicit sex-talk in the classroom (although, let’s be real, it’s a factor).

Taken as a whole, these observations tell me that I’m not just teaching my students about abstract legal principles. I’m offering them a vocabulary for framing their own intimate encounters and for making sense of the stories they’ve been told by others.

Here are three key revelations that seem to surprise, provoke and resonate with my students, year in and year out.

The grey zones that aren’t so grey
We often hear talk of the ‘grey zones’ of consent but, as I explain to my students, the legal boundaries of consent are far more black-and-white than we might expect. This is because the NSW legislature has gone to great lengths to clarify the law, with many of the Crimes
The legislation specifies that a person's consent provisions inserted to overcome historical injustice in the courts, and to counter the ‘rape myths’ that have endured for centuries.

One example of a rape myth is that we can assume a person consented to sex if they didn’t protest, fight back, or scream for help. The law of NSW rejects this rape myth by offering a positive definition of consent. We know that fear and trauma responses vary from person to person and may entail ‘fight, flight or freeze’. In recognition of the ‘freeze’ response, and as part of a general policy acknowledgement that a person shouldn’t have to take steps to prevent others from raping them, mere ‘submission’ to sexual intercourse does not amount to consent. Instead, the law requires that a person ‘freely and voluntarily agrees’ to the sexual intercourse.

The legislation also offers clear examples of situations that cannot, as a matter of law, amount to consent. These include: where the person doesn’t have capacity to consent (because of factors like age); where the person doesn’t have the opportunity to consent because they are unconscious or asleep; where a person agrees to sex because of threats of force or terror or because they have been unlawfully detained; or where a person has only agreed to sex because of a particular mistaken belief (such as mistaken identity).

The legislation specifies that a person might not consent due to factors such as substantial intoxication or coercion, or because of an abuse of power by a person in a position of trust or authority. Consent needs to be continuing and it can be withdrawn at any time, for any reason. And the law recognises that both parties must consent: it rejects, at least formally, the heteronormative, gendered idea that men demand sex and women ‘permit’ men to have sex with them. In these respects, the law of consent is clear and robust.

The justice gaps

But, in order to secure a conviction for sexual assault, it’s not enough to show that the accused had non-consensual sex with another person. The prosecution must also prove, beyond a reasonable doubt, that the accused ‘knew’ the other person was not consenting. It’s this element, the ‘guilty mind’, that makes the accused culpable. As a matter of law, an accused will ‘know’ about non-consent in a number of situations, including where he or she considered the possibility of non-consent but went ahead with sex anyway, or didn’t even bother to consider the question of consent. At this stage, the court must consider all the circumstances of the case, including any steps that the accused took to ascertain consent.

In other words, there are positive legal obligations to check that the other person is consenting (something that the appeals court recently confirmed in the high-profile case of Lazarus).

Sometimes a court will be convinced that the accused actually had non-consensual sex, but won’t be satisfied that the accused ‘knew’ the other person didn’t consent. This will result in an acquittal, which, in accordance with fundamental principles of criminal law, is the proper and just outcome for the accused. But it leaves us with a deeply problematic justice gap, because we have a complainant who has experienced a violation, but we have no crime.

A ‘not guilty’ verdict is essentially a legal determination that there was no crime of sexual assault, and this can be misconstrued as meaning the complainant didn’t experience the violation of non-consensual sex. For many complainants, so often women, this feels like nothing short of erasure. The criminal law has failed to bridge this justice gap.

The limits of the criminal law

As we wade through the case law on sexual assault, students see that sometimes the obstacles to justice lie in problematic or contested public attitudes to sex and gender norms. Sometimes jurors bring their personal prejudices and oftentimes the laws of evidence and criminal procedure bring on injustices of their own.

And it also emerges that, even with all of the legislative efforts to draw indelible lines in the sand, there are limits to the law of consent as a framework for regulating sex. The law of consent doesn’t demand, for instance, that sex caters to the particular desires of participants, that everyone feels they have been treated with respect, that no one feels used or cheated, that everyone gets the sex they want, that the sex is fun or hot or even ‘not disappointing’.

Sometimes the criminal law has ill-considered consequences, constraining sexual practices that are desired and welcomed by both (or all) parties. And, so often, sexual assaults in the ‘grey zones’ don’t even come to the attention of police. There are limits to what we can ask of the criminal law.

There is an interpersonal, human element to sex that means we will always need to be able to negotiate the pleasures and frustrations of sexual intimacy. These are conversations we have as individuals and as communities: the law of sexual assault is vitally important but it can only take us so far. Some of these questions need to be resolved outside the courtroom and, indeed, outside the classroom.

KATHERINE FALLAH
Lecturer
Faculty of Law

Photographer (K Fallah): Shane Lo
Yes image: Jon Tyson via unsplash.com
Stop image: Kai Pilger via unsplash.com

You can take the first step to improve your understanding of consent by completing Consent Matters training at uts.ac/consent-matters

“Even with all of the legislative efforts to draw indelible lines in the sand, there are limits to the law of consent as a framework for regulating sex.”
We’ve all seen the images – whales with stomachs full of plastic. Sea birds with plastic milk bottle rings stuck around their necks. Fish swimming through a haze of plastic particles in our once-pristine oceans. Petroleum-based plastics are having a huge – and devastating – impact on our planet.

But, Professor Peter Ralph isn’t the type to surrender in the face of an environmental catastrophe. In fact, the Director of the UTS Climate Change Cluster (C3) and founder of the Deep Green Biotech Hub is working with his team to devise an unlikely – and revolutionary – solution that has the potential to transform coastlines and marine environments across Southeast Asia.

SEAweed-Tech (the SEA stands for Southeast Asia) is a collaboration with NetWorks™ at the Zoological Society of London. Together, they aim to develop an innovative green industry for coastal seaweed farming. The project hinges on the development of novel, zero-waste green chemistry to produce seaweed-based bioplastics, initially in the Philippines where there is already large-scale seaweed farming.

These bioplastics have the potential to reduce future plastic waste, encourage local environmental stewardship of marine environments, and deliver a new income stream for seaweed farmers in the region.

“Our goal is to reduce the quantity of ocean plastic pollution by delivering an eco-friendly alternative,” explains Peter. “By making plastic biocompostable, if it’s put into waste then it won’t remain there for thousands of years; it’ll break down and dissolve.”

It’s an ambitious initiative, and one that’s making waves in the global innovation space. In the next two years alone, SEAweed-Tech could directly engage 2500 families in Indonesia and the Philippines and extend current seaweed farming practices to include seaweed-based products for bioplastics.

By 2022, more than 1 million people could indirectly benefit from the research, and more than 100,000 hectares of the ocean could be better protected.

So, how are these next-gen plastics made? SEAweed-Tech bioplastics are made with gel-based chemicals.
By 2022, more than 1 million people could indirectly benefit from the research, and more than 100,000 hectares of the ocean could be better protected.

(phyocolloids) that exist in seaweed. The seaweed derivatives can replace the conventional petro chemical-based raw materials for the production of many current plastics. They’re extracted from the seaweed using a zero-waste, non-toxic process developed by Peter and his team that produces high yields. That’s a big change from existing phycocolloid extraction techniques, which often produce harmful waste products that are damaging to the environment.

What’s more, the technologies required to produce these bioplastics are being made specifically for use in Southeast Asian countries. The same countries that are among the hardest hit by marine plastic pollution and where many seaweed farmers struggle to make a living selling seaweed to the food industry.

SEAweed-Tech provides farmers with an alternative product market by equipping local farmers with technology and expertise to sell partly-processed seaweed materials into new local supply chains. It’s an entry point into a global industry that produces an estimated 4 million tonnes of bioplastics every year – a figure that’s set to double or even triple by 2025.

“To get to a place where the globe is ready to support a population of 9 billion, we need to deliver technologies that are transportable and translatable to the needs of developing countries. I think this project is a classic example of how that can be done,” Peter says.

As well as creating a new income stream and the opportunity to reduce future plastic waste, the initiative also encourages long-term, local environmental stewardship of marine environments.

“We’re bringing the process chain back to the local community where the seaweed is grown, so the farmers are making a higher-value product,” explains Peter.

“The ultimate goal is to have our bioplastics produced in the Philippines and for the manufacturers to also make a margin on the process.”

It’s an ambitious project, but one that aligns with Peter’s clear-eyed focus on a sustainable future for our planet. That’s a goal that he and his colleagues in C3 (the largest algae biotechnology research program in the southern hemisphere) have been working towards for many years.

And, now Peter believes it’s more achievable than ever.

“In the next five years, I want to see the development of an Australian algal bioeconomy,” he says.

“I want to see industries that are de-carbonising and using sustainable raw materials for a broad range of industrial processes. I want to end the use of fossil-based carbon sources that are currently needed for industry production.

“I’d estimate that there are 20 industries that we’re currently engaged with that are transitioning to using sustainable, algal-based carbon compounds, so we’re already on the way, but we’re not there yet. Continued investment in research will be critical in achieving this goal.”

CLAIRE THOMPSON
Photographer: Jesse Taylor
Animation stills: Alex Dray and Oliver Abbott

Find out more and view the video at uts.ac/seaweedofopportunity

By 2025, there will be one tonne of plastic for every three tonnes of fish in the ocean. But scientists are working with some of the world’s worst affected communities to solve the problem with bioplastics.
Rachel’s interest in autism was sparked 10 years ago when she was studying her undergraduate degree. “I started working with families with disabilities, particularly families with autistic children, and it just sort of grew from there,” she says.

For the last four years, through her clinical practice, Rachel has also spent a great deal of time working with autistic adults, mainly autistic women.

Autism is characterised by social and communication difficulties, alongside repetitive behaviours, sensory sensitivities and special interests. But, Rachel says, there are many “subtle differences” between autistic men and women. For example, some women might show fewer social communication challenges when compared to men.

“It might be that autistic women have developed skills for coping with some of those difficulties,” says Rachel. “These strengths may make it challenging for autistic women to be identified.”

Rachel also says the majority of the instruments used to measure, assess and diagnose autism have been created using male samples. That, she says, can leave autistic females further disadvantaged, and going undiagnosed or misdiagnosed into adulthood.

It’s why, through her research, Rachel hopes to establish better methods for assessment and diagnosis that account for the differences between autistic men and women. Using large existing data sets and participatory research with autistic individuals, her research will try to understand some of the unique strengths and challenges experienced by autistic females, particularly in special interests, repetitive behaviours and sensory challenges.

Importantly, her research will evaluate how these differences might be related to outcomes such as mental health and wellbeing. It’s hoped that this will lead to earlier and more accurate diagnosis for autistic girls and women. Rachel says, “Particularly for autistic adults, a diagnosis is really important, as it forms part of their identity.

“I’ve always admired all of the families and individuals that I’ve worked with for their strength and resilience.

“I think having a daughter makes me feel more passionate about wanting to make some change in society. I want to make sure she can grow up in a world where people are equitable.”

SARAH KENT
Marketing and Communication Unit

Photographer: Fiona Livy
Nine. That’s how old Lucy Allen was when she was diagnosed with type 1 diabetes (t1d). As she grew older, however, Lucy began to struggle with the lack of support available to young adults.

“T1d is a chronic illness with no solution. It’s a 24/7 mind load of having to manage, think and calculate every little move you make,” Lucy explains.

“There’s no success when it comes to t1d, it’s a constant balance of keeping your blood sugar levels within range. I grew up with this illness and while I enjoyed comprehensive care as a child, that level of support falls away as you get older.

“I found myself in a space where I felt very isolated. I was left to search the internet myself for information and sort through Google’s 50 million results – trying to find what’s best for you is close to impossible.”

So, when she enrolled in the Initiatives to Entrepreneurship subject as part of the Bachelor of Creative Intelligence and Innovation (BCII), Lucy knew just what to do – develop an online solution to help people tackle t1d.

“I remember one of our tutors saying the best way to approach entrepreneurship is to find a sweet spot of something you have a lot of knowledge on and something you’re really passionate about. For me the type one space was that perfect fit,” she says.

To help her develop the idea post-university, Lucy recruited two friends and fellow BCII graduates, Polina Pashkov and Eliza Marks. Together, the three joined UTS Startups and have been continuing to develop their idea on a part-time basis. Together, in August, they launched Stitch Hub – Australia’s first online platform that curates and personalises support resources for people living with t1d.

“Stitch Hub is essentially a one-stop shop that offers information on everything from support groups, to products to clinicians, so people have a choice in how they manage their illness.

“UTS Startups is the perfect place for us, it’s a workspace where we’re surrounded by people in similar startups but who are tackling completely different problems. There’s this really beautiful exchange of mentorship, skill sharing and support – it’s fantastic.”

Since launching the platform to market, the feedback has been positive, Lucy says. “Users and the t1d community tell us that they feel like someone is finally building something for them, with an understanding of what they actually need and not just what they think they need.

“That’s not to say that Stitch Hub in its current form is exactly what people want or that it’s going to solve all their problems. But, we’ve got a list of features we’re looking to release to ensure we continue to provide value to users.”

These include a review system that allows patients and clinicians to assess and rank resources and a management portal that allows users to collect and store details on things like supplies and appointments in one place.

“Every healthcare space is struggling with streamlining and connecting their services and putting the patient at the centre of this process. As Stitch Hub was built on those two foundation principles, people see a lot of value in the technology we’ve created, so we’re confident and excited about the opportunities that lie ahead.”

For more information about Stitch Hub visit stitchhub.org

JENNIFER KIELY
Marketing and Communication Unit
Photographer: Dan Allen Media
Futures/histories

As each year comes to an end, third-year, honours and master’s students in the School of Design showcase their work in an annual display. This year, a small group of students have teamed up with design studio Trigger to create a showcase that spans five levels of Building 6. We talk to Trigger’s founder, and UTS alumnus, Gregory Anderson and visual communication student Wendy San to find out what it takes to bring the work of architecture, visual communication, and fashion and textiles students to life.

Wendy San
This type of exhibition, where UTS’s School of Design has combined all of the disciplines, has only happened once before, in 2017. We work with product designers, architects and interior designers throughout our degree, so why not showcase that?

Having it on campus also means that people can see where the work gets done and where the students are coming up with the ideas. I think it’s really good, even though Building 6 is a really hard space to work with!

For this process, I’m working with three other visual communication students – Kimberly Luo, Crystal Yiamkiai and Nicole Yeom – as part of the ‘2D team’. We’re working alongside architecture and product design students, the ‘3D team’. They take care of things like the interiors and spatial design, whereas we look at our marketing, signage and how we present people’s works. If we need the dimensions for a room, we’ll ask the 3D team, and if they needed branded artwork for something, they’ll come to us.

It comes down to what our skill sets are and how we can collaborate together to create something that speaks to the general audience. Being able to work on a public-facing project is not something you experience, day-to-day, as a university student. We have the power to shape the entire experience of families, friends and industry leaders which is the beauty of this project and what makes it so exciting!

Even though there are so many different types of works, like huge models for architecture or posters for visual communication, our responsibility is to make everything speak to each other, yet allow them to exist as unique standalone projects. We do this by working with Gregory and Chee Lam – an architect who is part of the Trigger team – each week, getting feedback from them and figuring out how we’re going to put it into practice.
At the beginning it was quite overwhelming because we didn’t know what we were doing. But, Gregory was the voice of reason. There was a significant moment in the first few weeks when we felt overwhelmed by the iterative process of coming up with ideas for the branding, but, once we told Gregory, he helped us see that this was in fact a normal part of the design process.

The whole process has actually felt like I’m working within his studio. A couple of us, like me, already work in industry. I’m a part-time graphic designer for an eyewear company, but there’s still so much to learn.

This is my last semester of uni, and after this I really want to work in user experience, which involves observing how people interact with products and utilising design thinking and problem solving strategies to develop an experience that will add value to their lives. I’ve discovered that I like working in the collaborative space, and with people from different disciplines, so that’s the avenue I want to go down.

Working on the end of year exhibition has given me the opportunity to dabble in this space and so far it’s been a lot of fun!

Gregory Anderson
I’ve always had close ties with UTS. I graduated in 1994 and have periodically lectured and supervised over the years. The university has evolved so much over this time and I’m learning each time I engage here.

This project is a collaboration between my design studio, Trigger, which specialises in design and strategy for curated and branded spaces, and UTS. When we were generating ideas for the UTS DAB grad show, we wanted to communicate a multi-disciplinary message, and indicate that there are not only connections but collisions as part of this process. There’s also a logical and emotional connection through all of the School of Design courses, and our objective for the exhibition is to show how they work together and what makes UTS unique.

It’s been a very hands-on process. The students are involved in all aspects of creating the exhibition; it’s a combination of being a bit of a classroom and a bit of a studio.

In fact, UTS has set it up so this subject is an elective for the students, rather than an extra commitment. It’s great having a dedicated team working on realising the exhibition. The structure of the team is that Chee and I are overall creative directors. At the beginning of the process we split the team into two groups: a 2D team made up of visual communication students, and 3D team made up of architecture and product design students.

I don’t call them ‘the students’, though. I call us ‘the team’. The students, Trigger and UTS are collaborators rather than a student/teacher set up.

Wendy has been an incredible force in the 2D team. She’s very organised, very well-spoken and very good at thinking things through. I respect her a lot. I think she’ll be a really amazing designer out in the industry – she’s creative but also has a lot of the business-like qualities that are really valuable and sought after.

When I studied visual communication there wasn’t as much collaboration. We would help each other, but our exhibition wasn’t much more than carpet partition walls and thumb tacks! There wasn’t a lot of multi-disciplinary collaboration happening. I think it’s great that students from different courses have been given the chance to work together on this project.

Working with a brand designer is very different to working with an architect, or an engineer, or a lighting expert, or an AV expert, and it’s really important to have this collaborative experience prior to entering the industry.

There are some components in the showcase that I’m particularly excited to see realised, but I won’t give it away. You’ll have to come and see for yourself!

Find out more about Futures Histories at utsdabgradshow.com

Photographer: Shane Lo
Imagine yourself walking through a medieval movie set in Hollowood. You’re playing one of Death’s minions. Your mission is to locate a ridiculously named movie star and snuff him out.

In Reaper Co – A Hollowood Adventure, that’s precisely what happens. But, “There’s definitely no anti-Hollywood vibe,” laughs Bachelor of Science in Games Development student Adam Bursill.

Adam, together with his colleagues Philip Johan Aubert, Sebastian Du Toit and Matthew Andrews co-created Reaper Co. Earlier this year, the video game proved a hit with both industry judges and students, winning Best Game (Game Design Studio 1) and the People’s Choice Award at the 2018 UTS Student Games Showcase.

“We were one of two 3D games in the class and ours had quite a wacky sense of humour,” Adam says of Reaper Co’s reception.

“There were a lot of different mechanics that worked together,” he adds. Like a mix of platform jumping, puzzle-solving and bantering with non-playable characters. Plus, a rewind feature that saves the day if you bite the bullet on a dodgy jump.

“It had quite an ambitious scope in the beginning,” Adam continues. In fact, the medieval movie set was originally one of three differently themed environments connected by a hub world. But, “We pared that down to one level with a boss fight at the end.” The boss creature – a game’s major enemy to beat – is a corrupted soul released by the actor’s death, he explains.

This streamlining was for a good reason: applying two years’ of knowledge, the team had to build the game in just eight weeks.

“We tried to be as crazy as possible with our brainstorming. Often our meetings descended into anarchy for a good hour, and we had to pare back and get some work done!” smiles Adam.

It’s all been for a good cause. Thanks to the showcase, Adam and the team were invited to present Reaper Co at an event by online game developer and publisher Wargaming. It led to internship opportunities and plans to further develop (and release) their game.

Unlike other games development courses, Adam explains that UTS’s offered more flexibility. “I wanted to go broader into IT programming with a focus in games so I was more employable.”

And, while he was initially worried about making the move from a career in event lighting, Adam was pleasantly surprised to discover you don’t need to be a maths genius to study programming.

“I’ve always loved computers, but assumed that computer science or programming were beyond me. I wasn’t terrible at maths, but I wasn’t great and I had no love for it.

“My passion is in programming, and games development has been the cherry on top.”

AMOS WONG
Faculty of Engineering and Information Technology
Photographer: Amos Wong
Game stills supplied by: Adam Bursill
UTS in print

Mania. It’s a word not often spoken. Nor, is the associated state of mind. Maybe it’s just my perception, but the word can even evoke a sense of discomfort in the ears that hear it.

Yet this word, along with others like ‘manic depression’, roll off the pen of Sam Twyford-Moore in the much-needed conversation-starter *The Rapids: Ways of looking at mania*. Since it’s such a complex topic, you may expect 273 pages explaining mania to be filled with long words that you need a PhD to unpack. Think again. It was a relief to find the only review that explained the effect of it as well as Sam explained mania itself.

In *The Rapids*, Sam effortlessly weaves his own experience with those that he’s observed. We’re reminded about the public display of mania experienced by Jason Russell (creator of the 2012 Kony campaign) and introduced to a more private one, in which Sam describes why he listened to *Sorry* by Justin Bieber on repeat.

His storytelling is raw, effortless and conversational, bringing the topic of mania, in its many rapid forms, to the everyday person. I admire how he does it without condescension, and rather like an older brother who’s offering his own honest insight.

How I wish I could present this review visually! At first glance, this beautifully bound, pink, hardcover book simply depicts two aristocratic, noble and fashionably dressed characters (men) from the 18th century. On closer observation though, one character’s clothing and make-up appears somewhat outrageous, with bold embroidery and an elaborate hair style.

These images, and the term ‘Macaroni men’, were enough to pique my interest, immediately reminding me of the 1970s punks in the Piccadilly Circus, London. And, though I admit I did judge *Pretty Gentlemen* by its cover, when I started reading I discovered it is so much more.

Peter McNeil provides a brilliant insight into 18th century men’s fashion, with a twist. His style of writing is fact-driven and accurate, with a touch of charm and 18th century satirical lingo.

In fact, I was surprised by some of the chapters that hooked me – ‘Facts and Fictions: The Macaroni caricature, personality and portraiture’ and ‘Pretty Gentleman: Macaroni dress and male sexualities’. And the images. For example, an image in chapter two which reminded me of Prince Harry’s outfit on his wedding day, but in black, and Harry’s was more Macaroniesque.

Though *Pretty Gentlemen* can be used as an academic reference, it also doubles as a delightful coffee table book. One that’s sure to be a conversation starter, and, I hope one day, be made into a documentary series or podcast!

**THE RAPIDS: WAYS OF LOOKING AT MANIA**
By: Sam Twyford-Moore
Publisher: NewSouth Publishing

**PRETTY GENTLEMEN: MACARONI MEN AND THE EIGHTEENTH-CENTURY FASHION WORLD**
By: Peter McNeil
Publisher: Yale University Press

“*They eat without pleasure, cry without pain, grow without knowing it; they desire nothing, fear nothing, know nothing.*” Though repugnant in hindsight, these vivid words of 17th century rationalist philosopher Nicolas Malebranche sum up the rationalist view of animals.

Reading *Animals in Australia*, you get a strong sense of Malcolm Caulfield’s frustration with the widespread cognitive dissonance with which we regard, and treat, animals. In focusing on Australia’s recent developments, he offers profound insight into the political background of animal welfare, contextualising it against the global background with the expertise of a lawyer deeply entrenched in the activist landscape.

But, it’s undeniably hard going at times. Australia lags behind the rest of the world, without much prospect for improvement. While scandals like the live export trade or cruelty in greyhound racing induce a wave of revulsion and outcry for change, the issues are swiftly swept under the rug and off the news agenda. That leaves regulation, law and even animal science in the hands of the only body that is truly invested – the Australian farming lobby, who have the ear of the Nationals, influence the Liberals and intimidate Labor.

Caulfield’s call to action is simply for us to ask more of our politicians. By outlining the pragmatic reasons behind moving towards a balanced welfarist argument – as distinct from the hard-line animal rights position – his book holds appeal for anyone interested in or curious about the situation for animals in Australia.

**ANIMALS IN AUSTRALIA**
By: Malcolm Caulfield
Publisher: Vivid Publishing

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**ANITA DAWSON**
Marketing and Communication Unit
Sam Twyford-Moore is the former director of the Emerging Writers’ Festival. He graduated from UTS with a Bachelor of Arts in Communication (Writing and Contemporary Cultures) in 2008.

**SHAHNAM ROSHAN**
Marketing and Communication Unit
Peter McNeil is a Distinguished Professor in Design History in the Faculty of Design, Architecture and Building and at Aalto University Finland.

**LAURA OXLEY**
Marketing and Communication Unit
Malcolm Caulfield is the Principal Solicitor at The Animal Law Institute and an Honorary Research Associate at UTS.
And it’s not just about November either. For two days (Monday 12 and Tuesday 13 November) Corporate Bodies International will be at UTS to provide male staff with free and confidential health checks. In a quick 15 minutes, you can check your risk of heart disease and type 2 diabetes, and receive personalised advice from a health practitioner. It’s part of the NSW Government’s Get Healthy at Work program.

Return to Work Coordinator Liz Baker says, “HRU is enthusiastic about opening up the dialogue on healthy workplaces. These health checks are designed to get men at UTS to engage with their health, both physically and mentally.”

For Ian, health and wellbeing initiatives like this are a great way to build a positive workplace culture. Reflecting on the Virgin Global Challenge, he explains: “You’re meeting other people and sharing, joining a team and working towards something that’s workplace-related, but not work specific.”

“My main goals for work are to work with a group of people that I enjoy, and to do work that is stimulating; the first part is helped by enjoying your surroundings and getting to know your colleagues and liking them on a personal level.”

Of course, making health a priority doesn’t end when November does. There are a range of resources and services that men, and women, can access via HRU all throughout the year. They include the Employee Assistance Program, parental leave, Health and Wellbeing workshops (like Ergonomic Workstation Setup, Resilient Mindset and Peak Performance), and events, including Walk to UTS Day.

The men’s health checks will take place on Monday 12 and Tuesday 13 November. For more information, visit the Health and Wellbeing pages on StaffConnect, uts.ac/healthandwellbeing

LOUISE YEH
Student Administration Unit
Photographer: Shane Lo
November

EXHIBITION
In the UTS Gallery’s latest exhibition, **Void**, contemporary Indigenous artists are brought together to explore the multiple ways in which the unknown can be articulated as space, time and landscape.

- **Until 16 November**
- UTS Gallery, Building 6, level 4
- art.uts.edu.au

**EXHIBITION**
Head to the Teaching and Learning Forum for a day of shared lessons around flipped learning, authentic assessment and more. With 50 interactive presentations and demonstrations facilitated by more than 70 UTS academics, it’s a day to network, share ideas, and see inside a variety of learning experiences across campus. All academics welcome.

- **Until 17 November**
- Building 6
- Opening event: Thursday 15 November, 6-8pm
- Tours: Friday 16 November, 12-2pm
- Design Symposium: Friday 16 November, 2-5pm
- Register at uts.ac/TLF18

**ART & U**

Katthy Cavaliere (1972-2012) was born in Sarteano, Tuscany and migrated to Australia with her parents when she was four years old. Katthy originally studied photography, but went on to work across a number of artforms, including performance, photography, video, installation, drawing and sculpture. Her artworks were coloured by her early childhood experiences of displacement, and later, by the loss of her mother through ovarian cancer.

Although Katthy’s works are intensely personal insights into her childhood and family connections, they are recognisable as shared human experiences.

In 2000, Katthy won the Helen Lempriere Travelling Art Scholarship and, in 2003, was awarded an Australia Council Visual Arts Board Studio residency in Milan, Italy. In 2011, Katthy was invited to exhibit in the Venice Biennale. Sadly, that year she was diagnosed with the same cancer that had claimed her mother. She died six months later, at the age of 39.

Katthy was an influential presence in Sydney and the wider Australian art scene during her relatively short career. This was articulated in the 2016 posthumous exhibition and publication produced by curator Daniel Mudie-Cunningham and the Museum of Old and New Art in Hobart.

**Invisible City** is one four works recently donated to the UTS Art Collection through the estate of the artist. All four are from the same time in the artist’s career – when she returned to Italy to work with ground-breaking performance artist Marina Ambravomic.

The donated photographs make a connection not only to Katthy’s body of work in video, performance, and installation but also to broader ideas and metaphors around issues of identity, connection, memory and place.

**WHAT’S ON**

**EXHIBITION**
Check out the annual design and architecture graduation festival – Futures Histories – which features the work of more than 500 students.

- **Until 17 November**
- Building 6
- Opening event: Thursday 15 November, 6-8pm
- Tours: Friday 16 November, 12-2pm
- Design Symposium: Friday 16 November, 2-5pm
- utsdabgradshow.com

**EXHIBITION**

Katthy Cavaliere, *Invisible City*, chromographic colour print on silver metallic paper, UTS Art Collection

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**JANET OLLEVOU**
UTS Art

Art & U profiles a piece of work from the UTS Art Collection every issue. To learn more about the collection visit art.uts.edu.au
UTS has done its bit for the environment by using environmentally friendly paper and ink to produce UTS CRICOS Provider Code: 00099F
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It’s hard to believe that the space-age structure of UTS Central has sprouted up so quickly!

In February 2017, the site was littered with the remnants of ye olde Building 2 (RIP).

Fast forward to February 2018, and the structure was eight floors tall and growing fast!

In June, the lifting-in of the final piece of the double-helix stair was a momentous occasion, soon followed by the start of installation of the striking glass facade.

Construction of UTS Central is on-track to be completed in mid-2019. You can find out more at uts.edu.au/utscentral

Photographer (Building 2, demolition, construction): The Time Lapse Company
Photographer (staircase, glass facade): Dan Buhagiar