

BMW GROUP + QUT
DESIGN ACADEMY

A B

JUNE 2022

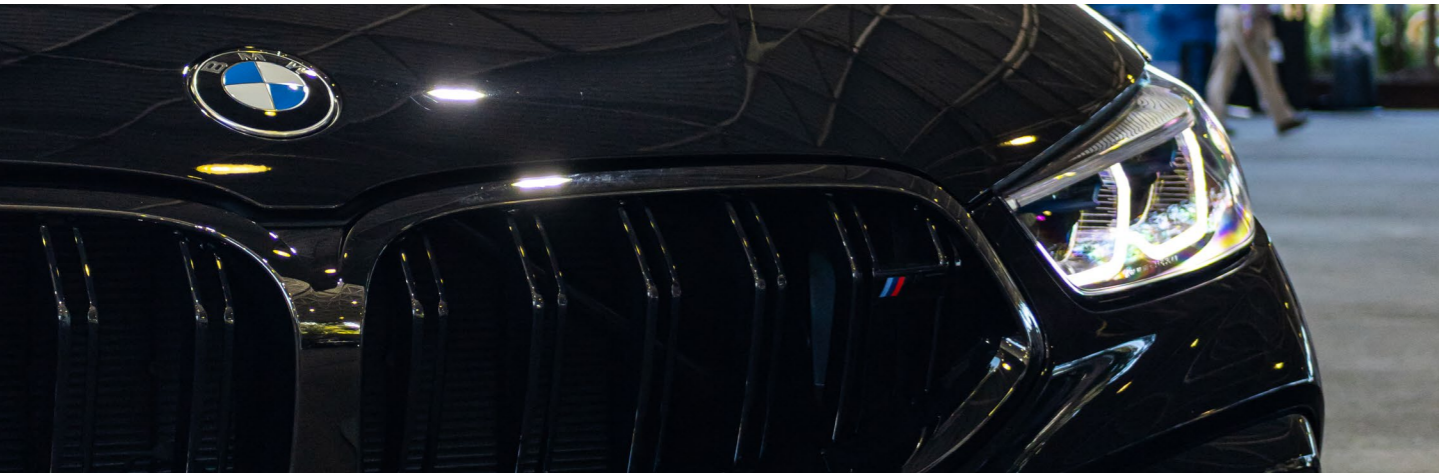
Welcome
Program Updates
Feature Article
Briefings
Academy Achievements
External Collaborations

NEWSLETTER



BMW GROUP QUT

WELCOME



Welcome to our mid-year newsletter. June was a busy month with various exciting initiatives happening with external collaborators, as well as future planning with BMW Group and idealworks colleagues.

One of our significant events that occurred in June was the invitation to showcase the BMW Group + QUT Design Academy and our M8 Competition Coupe at RACQ Motorfest Future Mobility exhibition. The RACQ Motorfest is a large annual event that saw more than 10,000 people attend and helped raise over \$20,000 for the RACQ Foundation to enable its ongoing support of Queensland communities impacted by natural disasters. This was a very exciting event that allowed our team to discuss and showcase some of the work we do at the Academy, and talk all things cars with automotive lovers!

Another exciting event in June included the Brisbane BMW Drive Day. The BMW Group + QUT Design Academy team, as well as key QUT staff were treated to a very special day to drive a range of incredible vehicles and enjoy a beautiful lunch. The cars included an M440i coupe, MINI John Cooper Works GP, X3 M40i, 420i coupe, X6 X30d, MINI John Cooper Works Countryman, among a host of other outstanding vehicles. It was a very exciting day testing out these beautiful machines in a relaxed environment. Thank you so much to the wonderful team at Brisbane BMW Group for the opportunity.

We continue to work closely with various teams at BMW Group and idealworks on new Special Projects for the Academy team, Work Integrated Learning semester 2 projects and Industrial Design Capstone studio projects in the second half of the year. We are very excited about these and other projects coming online in the coming months. Many of these continue to be under non-disclosure agreements, but we will have the opportunity to discuss and showcase some of these soon!

Take care,

Dr Rafael Gomez
Founder & Academy Lead

PROGRAMS



INTERNSHIPS

The Internship program focuses on Fostering Design Excellence. It offers high-performing QUT design students an opportunity to advance their learning through real-world projects, and provides a pathway for paid internship placements at BMW Group in Munich, Germany.

Another Semester, Another 4 Interns

This month we congratulated another 4 students on the completion of their Academy Internships. Well done to Elizabeth Moss, Ashley Fenton, Henry Gomez-Borowski and Magnus Schultz, who all delivered a high quality of work and excellent ideas in their final presentations to the Academy team, plus our colleagues at BMW and idealworks in Germany. We wish them all the best for the remaining studies and future work endeavours.

Check out our Instagram account for some photos and information on each of their projects, as well as our website for Blogs written by each student about their Internship experience.

RESEARCH

The Research program centers on Exploring Knowledge Horizons. We have initiated a progressive research agenda for PhD and MPhil students to conduct world-class research through the Academy.

Making Progress

Our Research Associate, James Dwyer, has spent the past few weeks gathering participants for his research study. This is the next big milestone for his MPhil scholarship which is due to conclude at the end of the year. Additionally, James has also put a lot of effort into finishing off the Phase 1 stage of the Transport and Main Roads project that he is a Research Assistant on. Phase 1 of this project will end early July.

SPECIAL PROJECTS

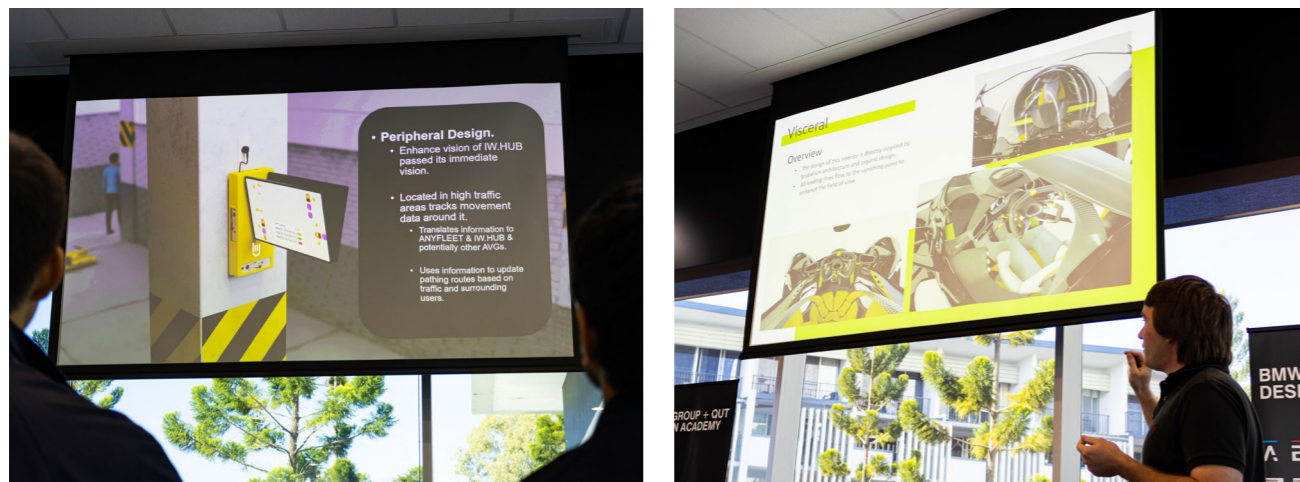
The Special Projects program pioneers world-first projects by Advancing Cutting-Edge Technologies. It is tailored for professional design graduates to work on advanced R+D projects for real-world applications. These projects are established by BMW Group in Munich and are supported by the Special Projects team at the academy.

SORDI, Blogs and Upskilling

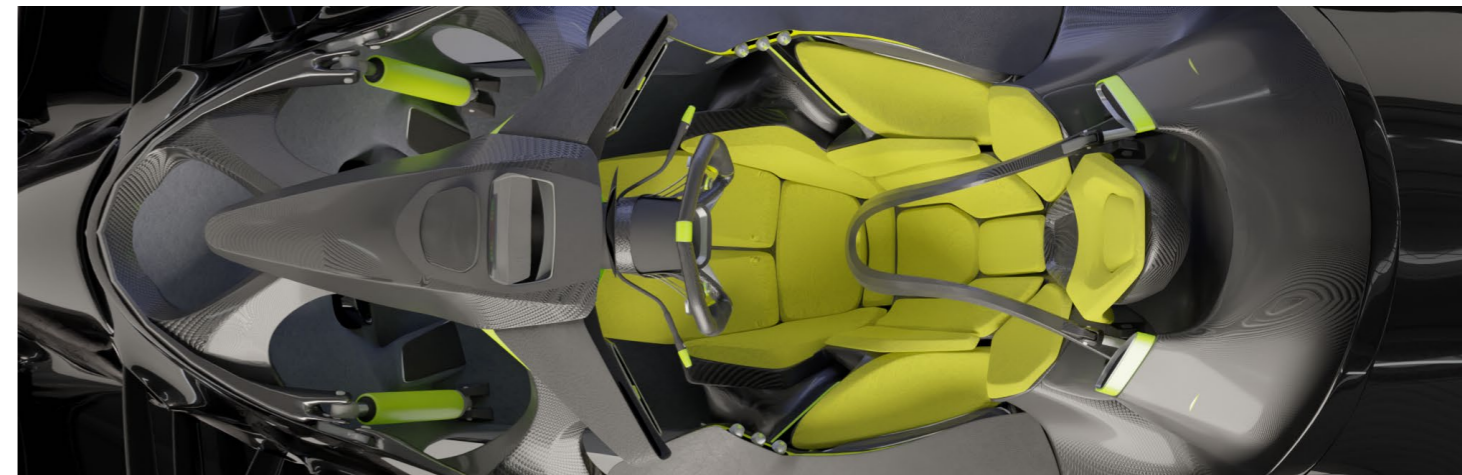
This month BMW Group published SORDI, an open-source dataset for training AI. We are happy to say that the Academy team and wider group of previous BMW interns from QUT have created many of the assets within the dataset. You can read more about SORDI, and visit the official SORDI website via our [Special Projects](#) page.

We have also just published our own set of blogs which detail the AR experiences we created for our M8 Competition launch event. If you are interested in seeing some of the behind-the-scenes and processes for each of the three AR experiences, head over to the Blogs page on the Academy [website](#) for a read.

Lastly, we have used this month to begin planning some upskilling and advancement courses that we wish to undertake. The aim is that these will enhance and widen our design skillsets, allowing us to provide future Academy interns with more knowledge and resources for their own projects and skill development.



FEATURE



USING GRAVITY SKETCH IN DESIGN WORKFLOWS

Magnus Schultz
Semester 1, 2022 Academy Design Intern

Hi, I am Magnus Schultz, I'm an Industrial Design student and have recently completed my internship at the BMW Group + QUT Design Academy. While interning at the Academy I designed the interior and exterior of an autonomous hypercar, with every last detail of the car was designed in the [Gravity Sketch](#) program. For those who are not familiar with this program, it is a virtual 3D modelling software that allows you to create in a 3D virtual environment. During my time in the program I have seen the impact it has made on my design process.

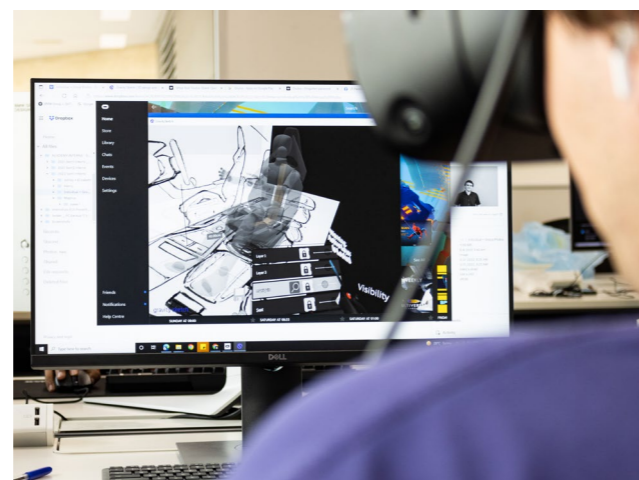
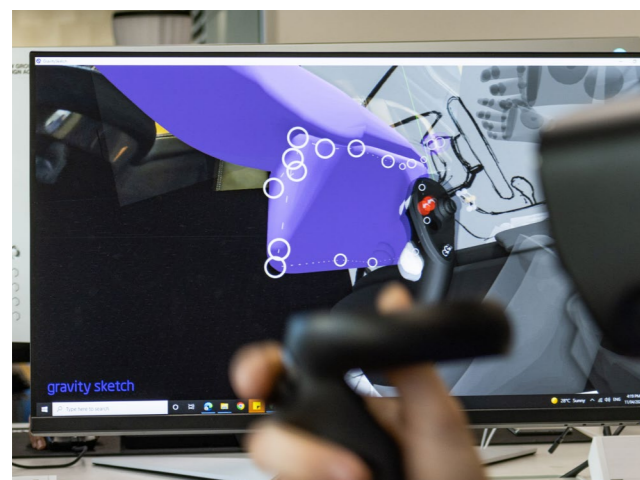
Similar to traditional design work I will often start with a sketch, however, in Gravity Sketch I am able to draw in 3D straight away. While this is possible in other software, in Gravity Sketch I can draw in any dimension and with rapid pace. This freedom to very quickly iterate my design greatly impacts my process as it allows me to rapidly prototype models to scale.

When working in the program it is an immersive experience, and the sense of scale that you get from being in Virtual Reality is unmatched by any other program. As a designer we always design products or experiences for other people, and therefore it is important to ensure that your design can be easily used. In traditional modelling we would often make many physical models to iterate on the functionality and human interaction, as it is tricky to get this perfect when you are designing on a computer screen. However when using Gravity Sketch I can easily switch my scale to correct proportions and interact with my design to get an understanding of how it will perform in real life. There is even a Passthrough mode that allows me to see my model in Augmented Reality which allows me to judge the scale against real objects and people in the environment.

The final point I will mention is about the type of modelling and how it differs from traditional CAD modelling. In Gravity Sketch you are limited to Sub-D (sub-division) modelling or NURBS modelling. I have spent my time in the program learning the ins and outs of Sub-D modelling and it is by far the quickest form of modelling I have used. This has impacted my design process as I have quickly been able to flesh out my design and then can go back and refine the details if I wish. When I was modelling using traditional CAD software like Fusion360, all of the design iteration was done on paper and I would usually only make minor adjustments to the design on the computer.

Overall, I would say that the Gravity Sketch software is immensely beneficial for the quick iteration and visualisation processes of design.

Magnus Schultz



BRIEFINGS



ACHIEVEMENTS

- Semester 1 Academy Interns finish and present their designs
- BMW Group publishes SORDI, an open-source dataset which has had significant QUT involvement
- Brisbane BMW and QUT partnership strengthens with two exclusive driving focused events for Academy and QUT staff

EXTERNAL COLLABORATIONS

RACQ MotorFest

On Sunday 19th June we attended the RACQ MotorFest, exhibiting our M8 Competition in the Future Zone section of the event at the RNA Showgrounds. This was a great opportunity to promote the BMW Group and QUT partnership to the wider public, and of course display our awesome M8 - of which many people took interest in.

A massive thank you goes to Caitlin and RACQ for the official invite, and for hosting us. We are already looking forward to next year's event.

Brisbane BMW

This month we were extremely fortunate enough to receive an invite to the BMW Driving Experience at Norwell Motorplex. Our Design Associate, Jordan Domjahn, joined Levi Swann from the QUT School of Design for a

BMW GROUP + QUT DESIGN ACADEMY

day of driving some of BMW's most recent models. We were able to do paced laps of the track in M3 and M4 Competition vehicles plus an X3 M40i, a timed motorkhana course in an M2 Competition, and finished the morning off with a hotlap in an M3 Competition. It was so much fun and a great way to experience some of what BMW M cars are capable of.

We also ended the month with a QUT Drive Day, organised by Brisbane BMW. The Academy team joined other QUT staff Prof Scott Sheppard Deputy Vice-Chancellor International and External Relations, Prof Mark Harvey Deputy Vice-Chancellor Business Development, Margo Powell Executive Director Advancement, Prof Lisa Scharoun Head of School of Design, Kelly Tomlinson Executive Officer to the Vice-President (Business Development), Assoc Prof David Holmes, Nicole Kielly-Coleman Development and Partnerships Coordinator and Andrew Peterson, and were able to drive a selection of BMW and MINI vehicles through the scenic roads of Mt Nebo and Mt Glorious. We finished the morning with lunch at Same Same restaurant in Fortitude Valley.

Once again, a huge thank you to Jasmine and Kristy for the invitations and organisation of the two events for this month! We cannot wait for more of these events in future.



BMW GROUP + QUT DESIGN ACADEMY





info@bmwgroupqutdesign.academy
www.bmwgroupqutdesign.academy
@bmwgroup_qut_designacademy

Z2-308 + Z2-407, QUT Kelvin Grove
Brisbane, QLD