## BMW GROUP + QUT DESIGN ACADEMY

## **JULY 2021**

Welcome Program Updates Feature Article Briefings Academy Achievements BMW Group Partner Update

# NEWSLETTER







## **WELCOME**



So many exciting things have been happening this past month across all of our areas including the launch of some very important initiatives that are central to the BMW Group and QUT collaboration. First of all we began promoting our semester 2 Work Integrated Learning Internship Program. This is our flagship program for QUT student interns and allows students to experience real in-depth access to the Academy and the super cool work we do with BMW Group. We are also very excited to have launched our PhD and MPhil scholarship research projects that will continue to build and expand our strategic partnership with BMW Group. Make sure you check out our website under "Research" for detailed information for how to apply for PhD and MPhil scholarship projects.

As you will read in our Partner Update section, our Design Associates are building momentum on key projects with BMW Group and idealworks. We are very happy with our new team, and it is great to have the new energy in the office. We look forward to August as we begin to progress with our exciting initiatives for the second half of the year.

All the best.

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.

## Semester 2 Academy Internships

We recently confirmed our list of in-house and BMW Group projects for our Semester 2 Internship program, which will be open to students from Industrial Design, Interaction & Visual Design, Visual Communication Design, and for the first time, Games Design students. We have two positions available for Games and Interaction students, who will be working on a live project for BMW Group. The other two positions will be for students from Industrial, Interaction or Visual Communication disciplines. They will get to choose a project within the Academy, or to work on a live topic for idealworks.

Following on from the confirmation of our internship project options, we hosted an online information session for students interested in the program. With a high attendance number in the meeting, we are looking forward to receiving applications and welcoming our next round of Academy interns in early August.

## Semester 2 Impact Lab 4 unit

In addition to our own Internship program, we have also revised and confirmed our projects for the Impact Lab 4 unit this semester. Like last semester, we are offering projects for IL4 students to complete with the Academy acting as their industry contact for the duration of the project. We have a couple of Industrial Design







and Graphic Design themed projects on offer for students - up to four students will be selected and begin their chosen projects in August.

## 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.

### Further research underway

Our Research Associate, James Dwyer, has been busy writing and refining his Research Proposal, which is due early next month. James has also been conducting additional small scale experiments and developing his skills in programming for AI behaviours and Virtual Reality. His aim is to explore potential methods for his research study in the near future.

James has also been accepted into the role of Research Assistant, alongside our Founder + Lead, Dr Rafael Gomez, Dr Alexander Paz, Michal Ransome and Etikaf Hussain. Their research will explore and develop Universal Design Standards and Principles for Automated People Movers as part of a collaborative project between QUT and Transport & Main Roads.

## 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.

### Work continues for BMW Group

This month we had our two new Junior Design Associates, Tim Lim and Epifanio Pereira, start work at the Academy. They have both hit the ground running and are busy working on projects for idealworks in Munich, one being a new project that Tim is leading. We also have some additional Special Projects on the horizon, which we aim to commence later in the year once the current projects are complete.

## **FEATURE**



## **RESEARCH: EXPANDING NEW KNOWLEDGE HORIZONS**

James Dwyer Research Associate (Masters of Philosophy)

As research and scholarship applications start opening up, I thought it would be a good time to reflect on how I started my own research project as part of the BMW Group + QUT Academy. I want to highlight some of the opportunities the academy has provided me in terms of building my career, skills and experiences in the research space and what our future research projects will offer applicants moving forward.

Research at the BMW Group + QUT Academy is centred around the vision of exploring new knowledge horizons to understand the impact of and help shape the advancement of cutting-edge technologies. These areas include virtual reality, augmented reality, artificial intelligence, simulations, autonomous systems and robotics. As part of this larger program, my work has focused on advances in Human-Robot Interface. Focusing on how we, as people, can better communicate and collaborate with robots to overcome new and emerging challenges that we face into the future.

The benefits of this partnership for me as a researcher are massive. Being able to collaborate directly with engineers, software developers, roboticists, and logistics specialists that are currently developing these technologies in a world-leading company is an incredible opportunity. It allows me to gain deep real-world insights into the challenges they face and the realities of implementing cutting edge technologies and systems. To help inform the design of these systems moving forward and bring a human-centred design perspective to the table, which is so important to design at QUT, is a huge opportunity and privilege. It also provides me with the space and time to further develop the skills that I am passionate about in research, programming, UX and



interface design.

As of Sunday 1st of August, I will have officially submitted my formal research proposal. While I have almost hit my first major milestone, there is so much more to come, not only for myself but for future students and researchers wanting to get involved in the space. I can't wait to get started with the real hands-on work surveying, prototyping, observing and interviewing experts and participants to gain insights into the future of human-robot interfaces.

Our future plans are broad and cover a wide array of research opportunities emerging in three major areas. The first area centres on human-computer interface, human-machine interface, human-robot interface looking at social robotics in industry, wearable technology, safety systems. The second area is design in industry, focusing on what sets designers apart in their thinking and process, visualisation, prototyping and 3D modelling skills. Finally, new opportunities are soon to come in vehicle design interface and technologies including; advanced vehicle interfaces, future vehicle UX, and autonomous vehicle technologies. At the core of all this is the importance of the human- centred perspective and approach, which is integral to design and unique in design research.

## BRIEFINGS



## **ACHIEVEMENTS**

- Meeting with BMW Group staff to discuss semester 2 WIL Internship project for Academy Interns
- Expression of Interest online presentation held for QUT design students interested in a semester 2 Academy Internship
- Epifanio Pereira and Tim Lim start at the Academy as Junior Design Associates
- Impact Lab 4 projects confirmed, with applications opening in the last week of July
- second half of the month

## **BMW GROUP PARTNER UPDATE**

### Dylan Sheppard Digital Design Lead, idealworks

G'day from Munich! Ramp up, roll out, and outdoor dinning — summer in Munich is in full swing at idealworks and BMW Group.

The last weeks in the partnership with the academy and our teams in Munich have been extremely busy; we said goodbye to the last remaining intern based in Germany, and I am pleased that Sebestian has made it back home safe and sound! Its been great to hear that all of our past interns through the program have slipped back into full-time industry positions - further credit to both their skills and the benefits of the program.





- Planning continues for big announcement coming later in the year, with significant milestones reached in the

## BMW GROUP + QUT DESIGN ACADEMY

This month we also finalised the ramp-up of the Australia-side team at the academy, with Epi and Tim officially joining our team as designers. Its great to see the team expand and looking forward to the work we will do together! Epi and Tim join the academy after internships in Germany, and will support Jordan in day-to-day design work.

This month our major work with the QUT academy focuses on bring up of our digital asset libraries, as well as working on solutions to expose our digital assets to the greater team at idealworks. Alongside this, the team continues to work on interactive 3D for marketing, specifically customer configurator design, and applying 3D design effort to our fleet management software AnyFleet. All exciting projects in the works, and we're all looking forward to hitting major milestones in the coming weeks.

In the last month we also expanded our project scope to include Hams Hall, BMW Group's engine production facility in the UK. New projects here will focus on supporting digitisation efforts, and bringing to bear simulation for robotics planning and optimisation.

At idealworks and BMW, we're looking forward to a busy and productive next couple of months - lots of progress being made on all fronts and we're excited to share results soon, with some announcements in the works to be made shortly. We're also hoping to re-open our overseas internship program sooner rather than later, as vaccinations become readily available here in Munich, and Covid-19 numbers have begun to normalise. For the first time in 5 years we have empty desks at idealworks HQ, and no QUT interns! Hope we can change this asap, stay tuned.

Stay safe and happy summer.

Cheers, DS

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## BMW GROUP + QUT DESIGN ACADEMY

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