

YOUTH RESEARCH FORUM **SHOWCASE**

DESIGNING FOR FUTURE FOOD

powered by the
Queensland Department of Environment and Science

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INNOVATION CENTRAL BRISBANE

ACCELERATING INNOVATION THROUGH COLLABORATION

In late 2021 Cisco invested \$61 million into six Australian university partnerships as part of their Country Digital Acceleration (CDA) program to drive digital skills, innovation, and transformation success. QUT is Cisco's Queensland university partner. Our research partnership is focused on Trusted Retail Innovation.

The Cisco CDA partnership program includes three key initiatives that each university leads exclusively in their state and collaborates on nationally and globally.

Cisco Research Chair

Dedicated to an emerging technology and industry vertical, Cisco Chairs are led by academics providing global research in the areas of, Trusted Retail, Ai and IoT, Digital Health, Digital Transport, Advanced Networking, and Security and Critical Infrastructure.

Innovation Central

Based at each university and named according to the city in which they are based, ICs are open innovation hubs enabling connection between students, researchers, industry, big tech, government, and start-ups. Fitted with the latest Cisco technology and led by university-industry partnership experts, the ICs offer industry partners a front door for student engagement, prototypes, research projects, and a landing pad for technology innovation.

National Industry Innovation Network (NIIN)

Membership to the NIIN connects all universities and industry partners for national scale, diversity of thinking and innovation impact. Cisco created the NIIN in response to business needs to drive greater university-industry collaboration to accelerate digital skills and transformation. NIIN partners include: Optus, Queensland University of Technology, University of New South Wales, Curtin University, La Trobe University, Flinders University, and University of Canberra.

Find out more

NIIN cisco.com/c/m/en_au/niin.html

QUT's Trust Research qut.edu.au/research/centre-for-future-enterprise

Queensland University of Technology was delighted to partner with the Department of Environment and Science to host the QUT Youth Research Forum for QUT students.

The QUT Youth Research Forum topic focused on DESIGNING FOR FUTURE FOOD - innovations for human friendly and carbon neutral foods.

Sparking an internal collaboration opportunity, the QUT YRF was led in partnership with QUT's Centre for Future Enterprise, Innovation Central Brisbane, QUT Entrepreneurship, and the School of Biology and Environmental Science. QUT designed the Youth Research Forum as a three-phase ideation program that aimed to enable student connections with industry; formation of teams and ideas; and provide the space, mentorship, and capacity to build working prototypes.

QUT's Youth Research Forum program included three key phases:

1. YOUTH RESEARCH FORUM & DATATHON

- Ideation and Pitch to Industry to win project budgets, valued up to \$20,000.

2. BUILD the PROTOTYPE

- A structured ten-week program, mentored by researchers, design thinking experts, and industry, to develop a working prototype .

3. SHOWCASE to GROW

- A public networking event attended by industry where students demonstrate prototypes and explore further interest for continued development.

The program has created a catalyst for multiple industry partners and cross-university engagement involving a significant number of internal and external stakeholders, including:

- QUT Faculties of Science; Business and Law
- QUT Entrepreneurship and Innovation Central Brisbane
- QUT Research Centres: Agriculture & Bioeconomy and Future Enterprise
- Industry: Cisco, Majans, Myera Group
- Gov: Department of Environment and Science



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Meet the Teams

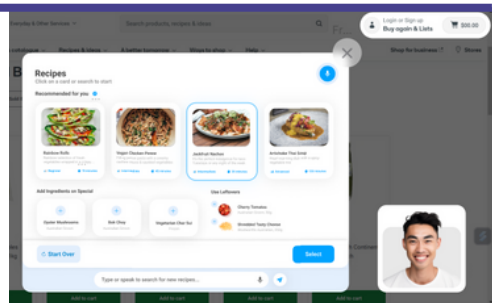


Hey Carta

Taylah, Olivia & Kaitlyn

This product aims to provide nutritional advice and healthy eating options that are more accessible and achievable for the wider population. This product can deliver personalised recommendations for food, recipes, and meal plans that are customised to the user's needs. By accommodating dietary preferences, nutritional needs, and health goals, leading a healthier lifestyle becomes simpler.

Hey Carta Platform



GoodWaste

Chris & Erin

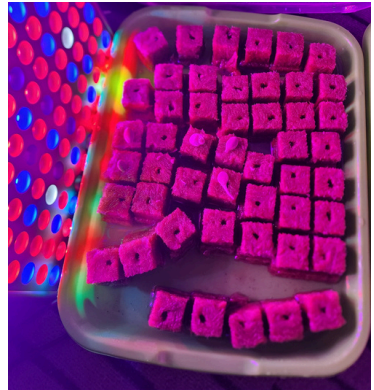
In this project, we are focused on leveraging technology to extend the value chain of food. We hope to achieve this by creating an online marketplace to facilitate the exchange of food and food by-products between parties, thereby extending their value chain and reducing food waste in primary production and manufacturing.

InGrow

Santiago



The Smart Hydroponic Greenhouse is a user-friendly, IoT-enabled solution that uses hydroponics and Nutrient Film Technique systems for efficient and sustainable plant growth. The greenhouse features an easy-to-build aluminum frame, various sensors to monitor and adjust growing conditions, and a web app for real-time access and control.



Meet the Student



Kaitlyn Chapman

WHAT DEGREE AND MAJOR ARE YOU STUDYING?

Bachelor of Business – International (Management Major)

HOW LONG DO YOU HAVE LEFT?

I only have 1 semester left at QUT, but I have a year long exchange in Norway before that!

WHY DID YOU JOIN THE YOUTH RESEARCH FORUM?

I'm passionate about entrepreneurship and love the idea of bringing a disruptive innovation to market.

WHAT MAKES YOUR IDEA UNIQUE?

Our idea essentially centralises convenience, inspiration, and personalisation for consumers in the food space.

GIVE US AN EXAMPLE OF WHERE YOU HOPE YOUR RESEARCH WILL HAVE IMPACT IN THE REAL-WORLD.

I would love to see our product enter all online retail spaces to provide the consumer with a hyper-personalised shopping experience, increasing their innate trust in ecommerce.

WHAT'S NEXT FOR YOU AND YOUR PROJECT?

I will be entering the Norwegian market with a goal of building industry connections and establishing a footprint in Scandinavian Europe. My cofounders and I will be working remotely to build beyond our prototype and bring it to market.

IF YOU WERE STARTING YOUR PROJECT AGAIN TODAY, WHAT WOULD YOU DO DIFFERENTLY?

Ensure all admin is complete BEFORE setting things in motion!

MOST IMPORTANTLY... DOES PINEAPPLE BELONG ON A PIZZA?

Absolutely not.



Meet the Student



Santiago Garcia

WHAT DEGREE AND MAJOR ARE YOU STUDYING?

Master of Engineering Management

HOW LONG DO YOU HAVE LEFT?

Six months

WHY DID YOU JOIN THE YOUTH RESEARCH FORUM?

I joined the youth research forum to solve real-world problems, expand my network, and gain experience in aggrotech. I love exploring and sharing ideas to reshape traditional workflows.

WHAT MAKES YOUR IDEA UNIQUE?

This greenhouse eases the entry barrier into agriculture by providing excellent user experience. It also gives users full control by providing customisation and powerful easy to use technology.

GIVE US AN EXAMPLE OF WHERE YOU HOPE YOUR RESEARCH WILL HAVE IMPACT IN THE REAL-WORLD.

We imagine a future where everyone can eat healthier and experience affordability, flavour, and nutrition for themselves, their families, and even their businesses.

WHAT'S NEXT FOR YOU AND YOUR PROJECT?

We will build a community on social media and upload the build process from the first prototype. We will gather valuable feedback to improve our product and align it more closely with the needs of our users. Finally, we will launch a crowdfunding campaign for everyone to support and have access to the smart hydroponic greenhouse.

IF YOU WERE STARTING YOUR PROJECT AGAIN TODAY, WHAT WOULD YOU DO DIFFERENTLY?

I would have made a more extensive list of suppliers for all necessary resources both within Australia and overseas. Comparing specifications and shipping times with more providers would have allowed us to make more informed decisions.

MOST IMPORTANTLY... DOES PINEAPPLE BELONG ON A PIZZA?

Absolutely, I am an advocate for exploring new experiences. Pineapple on a pizza can inspire someone to think about the next breakthrough in technology.



Meet the Student



Erin Xu

WHAT DEGREE AND MAJOR ARE YOU STUDYING?

Bachelor of Communications (Advertising and Public Relations Major)

HOW LONG DO YOU HAVE LEFT?

I've got two more years to go.

WHY DID YOU JOIN THE YOUTH RESEARCH FORUM?

I'm enthusiastic to delve into businesses that create value and have a positive social impact while exploring solutions for reducing food waste with innovative technological solutions.

WHAT MAKES YOUR IDEA UNIQUE?

- Marketplace model: We pioneer a waste repurposing marketplace model in the food industry to push food waste down the value chain.
- All-Inclusive Service: Simplify waste sourcing and handling with our platform, eliminating the need to contact multiple suppliers and manage complex logistics.
- Brand Exposure and Community: Our community increases brand exposure for vendors and encourages collaboration with environmentally conscious businesses.

GIVE US AN EXAMPLE OF WHERE YOU HOPE YOUR RESEARCH WILL HAVE IMPACT IN THE REAL-WORLD.

Did you know that global citrus fruit processing generates approximately 10 million MT of waste each year? It's large quantity and perishable nature require large waste management investments. GoodWaste creates a positive impact by connecting vendors with buyers who repurpose citrus waste into products such as beverages, canned fruits, cosmetics, medicines and biofuels.

By leveraging this platform, we can transform a waste issue of 10 million MT into a remarkable opportunity worth 150 billion, and this is merely a glimpse of the numerous by-products it can assist in monetizing.

WHAT'S NEXT FOR YOU AND YOUR PROJECT?

I intend to commercialise the project to expand and minimise food waste in different regions. Alongside this, I aspire to establish strong connections with our customers to address their concerns and needs genuinely and continually.

IF YOU WERE STARTING YOUR PROJECT AGAIN TODAY, WHAT WOULD YOU DO DIFFERENTLY?

Definitely a lot of backup plans when things do not work out. I would also love to dedicate more time to learning different innovative technologies in the food industry.

MOST IMPORTANTLY... DOES PINEAPPLE BELONG ON A PIZZA?

Yes! But if you say no... post it on our marketplace before it goes into the bin.



Thank You

The 2023 QUT Youth Research Forum has displayed the true spirit of collaboration connecting QUT students with a wide and diverse group of academics, industry partners, and domain experts. The energy, enthusiasm, and excitement that has been generated has been acknowledged by senior executives across QUT and industry partners. Thank you to the many students for their contributions, creativity and collaboration. The ideas for Future Food are innovative and tangible.

Thank you to the QUT YRF industry partners for their significant contribution of time and expertise to the program. Thank you Ross Delacour from Cisco, Sailesh Patel from Majans, and Bruce Hardy from Myera Group.

Thank you sincerely to our partner Queensland Department of Environment and Science, with special mention to Meredith Nolan and Allison Bambrick, for the opportunity to participate in this program and your continuous support and encouragement throughout.

And finally, thank you to everyone in the QUT ecosystem for the deep collaboration and ongoing support during the QUT YRF. In particular to the project team who delivered the QUT YRF program: Prof. Sagadeven Mundree, Vibhor Pandey, Andy Clarke, Crystal Cooke, Laura Peachey Burgess, Anisa Hobaya, and Gemma Alker.



Stay Connected

PARTNER WITH US

There are many ways to engage with QUT's Innovation Central Brisbane.

Find out more about business engagement opportunities by emailing Gemma Alker gemma.alker@qut.edu.au.



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