HaRTCon Newsletter

Issue 1 | 2026

ARC Research Hub for Human-Robot Teaming
for Sustainable and Resilient Construction



Inside This Issue

1	Official HaRTCon Hub Launch
2	Inaugural HaRTCon Symposium
3	Communication, Documentation and Information-Sharing
4	Achievements and Engagement
5	Projects Progress and Agreements
6	Seminars and Knowledge Exchange
7	Looking Ahead
8	Seminars, visits, and activities

Official HaRTCon Hub Launch

The ARC Research Hub for Human-Robot Teaming for Sustainable and Resilient Construction was officially launched at UTS on **23 April 2026**.

The event brought together researchers, industry partners, government representatives and stakeholders to celebrate the start of a national collaboration focused on safer, smarter and more sustainable construction.

HaRTCon is a **$23 million** collaborative effort involving seven universities and **14+** industry and government partners.



Launch at a Glance

- Around **140** attendees
- Around **40** industry attendees
- **8** live demonstrations
- **7** universities represented
- **Industry**, **government** and **research** partners in attendance

VIP Guests / Speakers

- **The Hon. Julian Hill MP,** Assistant Minister for Citizenship, Customs and Multicultural Affairs / Assistant Minister for International Education
- **Mr Anthony Murfett,** Deputy CEO of the ARC
- **Professor Hugh Durrant-Whyte,** NSW Chief Scientist and Engineer
- **Professor Anika Gauja,** Pro Vice-Chancellor (Research), UTS
- **Professor Peta Wyeth,** Dean, FEIT, UTS
- **Distinguished Professor Dikai Liu,** Director of HaRTCon





Eight Live Demonstrations

The launch also featured eight live demonstrations showcasing human-robot teaming in construction, including intelligent robots performing tasks such as painting, tiling, drilling and handling objects.









Inaugural HaRTCon Symposium

Held on **24 April 2026**, the inaugural HaRTCon Symposium brought together around 60 researchers, students, industry professionals, government representatives and invited speakers.

The symposium brought together invited speakers and participants from across the Hub's academic, industry and government networks. The program was MCed by Dr Mahdi Hassan, Hub Manager, and Prof. Dikai Liu, Hub Director.

Symposium at a Glance

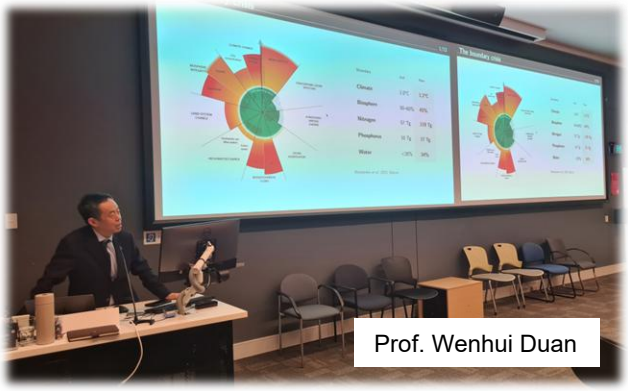
- Around **60** attendees
- Invited speakers
- Poster presentations
- Q&A, panel, and discussion
- Academic, industry and government participation





Featured Speakers

- **Prof. Wenhui Duan** (Monash University) — Planetary Robotics: Framework for Construction Automation
- **John McGuire** (CEO of Meinhardt Group ANZ) — From Steel Frames to Smart Machines
- **Prof. Ning Xi** (University of Hong Kong) — Construction Robots in the Artificial Intelligence Era
- **Dr Carol Hon** (QUT) Health and Safety of HRT in Construction
- **Greg Peters** (Laing O'Rourke) — Opportunities for Human-Robot Teaming in Construction
- **Dr Jun Wang** (Western Sydney University) — Building the Future with Data Intelligence and Robotics


Prof. Wenhui Duan


John McGuire

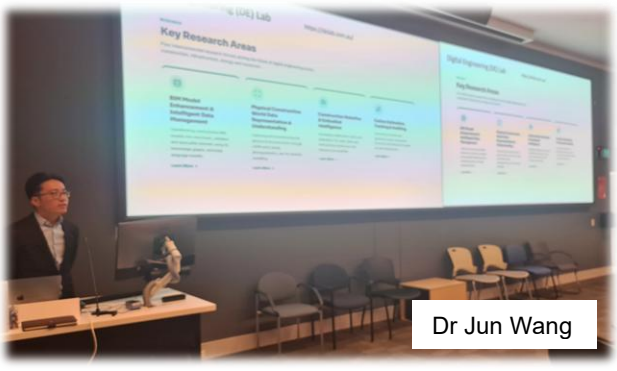


Prof. Ning Xi



Dr Carol Hon


Greg Peters



Dr Jun Wang

Staying Connected

HaRTCon has established key communication, documentation and information-sharing channels to support collaboration across the Hub's university, industry and government network.

Website

For Hub news, events, people, projects, technologies and public updates.

hartcon.org

Hub email

For general Hub enquiries and communication.

HaRTCon@uts.edu.au

Internal Coordination

For Hub members

KPI spreadsheet, records and admin processes established for tracking activities, reporting evidence and supporting Hub operations.

LinkedIn

For public updates, event highlights, media stories and engagement with the wider research and industry community.

linkedin.com/in/hartcon

YouTube

For videos, demonstrations and Hub media content.

youtube.com/@HaRTCon

Shared Folders

For Hub members

Hub shared folders established for internal collaboration, documentation, templates, governance records, meeting materials, project documents and shared resources.

Highlights of Achievements and Engagements

These figures reflect early progress across HaRTCon. Many projects have only recently commenced, and activity is expected to grow significantly as research, translation and collaboration continue to scale across the Hub.



20+
short visits
Academic and industry visits of less than one week across participating universities.



~25
briefings
Briefings to government, industry and business, end-users, and professional bodies.



20+
symposia, seminars and workshops
Organised or participated in across the Hub.



~10
invited or keynote talks



~10
Publications
Journal and conference papers.



10+
long-term visits
Academics and industry professionals, both local and international, visited participating universities and stayed for more than one week.



Weekly
media updates
Regular updates shared across HaRTCon communication channels.



Several
mentoring programs
Supporting researchers, students and capability development.

And counting …

As Hub projects continue to roll out, these outputs and engagement activities are expected to increase further.

Project Progress and Agreements

HaRTCon is continuing to build momentum across its project portfolio. A number of projects have now moved into active delivery, while additional agreements, recruitments and partner collaborations are progressing across the Hub.



7 project agreements fully executed

These projects have now commenced across the Hub.



3 project agreements nearing execution

Final drafts are being completed and are close to execution.



More project agreements in development

Additional agreements are currently being drafted.



4 new industry partners in progress

Four additional industry partners are currently being added to the Hub.



Recruitments in progress

Staffing and researcher recruitment are underway to support project delivery.

As more agreements are finalised and new partners join the Hub, project activity is expected to continue growing.

Seminars and Knowledge Exchange

HaRTCon has commenced regular seminar activities to support knowledge sharing, research exchange and collaboration across the Hub. UTS Node seminars are building momentum, while Hub-wide seminars help connect members across universities, industry and research programs.

First Hub-wide Seminar

- Facilitated by **Prof. Peng Wu**, Curtin University.
- Presented by **Dr Jun Wang**, Director of the Digital Engineering Lab at Western Sydney University.
- Focused on advanced data intelligence and robotic systems for a more productive, sustainable and intelligent built environment.
- Featured MetaBIM, EasyCarbon and InfraX, along with upcoming robotics collaborations with Main Roads WA, BGC/Atlas and Alex Fraser.

Recent UTS Node Seminars

UTS Node seminars have started and are building momentum. Below are three of the most recent sessions.



19 August 2026

- **Dr Gibson Hu** — “Robots in Timber Construction”
- **Resul Dagdanov** — “Improving the Trustworthiness of Robots Through HRC”

The seminar highlighted robotics for construction and the importance of effective collaboration and trust between people and robots.





22 July 2026

- **Distinguished Professor Yen-Chen Liu** — “Human-Centered Autonomous Robots in Dynamic Real-World Environments”
- **Associate Professor Johnny Kwok-Wai Wong** — “Construction Informatics and Automation”

The session explored construction informatics, AI, automation, autonomous robots, and opportunities for research exchange and future collaboration.





3 June 2026

- **Dr Mina Mortazavi** — “Prefabricated Seismic Mounts for Building Services Integration”
- **Dr Habib Ghasemi** — “Curved Bracing Systems in Steel Structures”

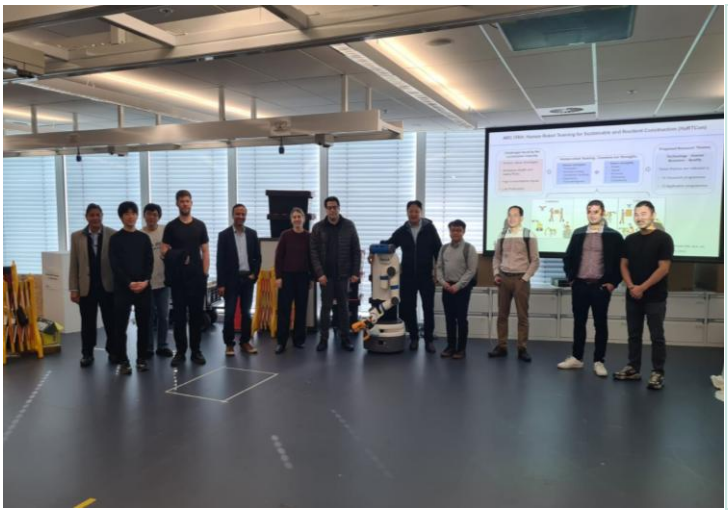
The talks highlighted research on prefabricated seismic mounts for building services integration and curved bracing systems in steel structures.

Lab Visits and Live Demonstrations

HaRTCon has hosted around 30 lab visits, using live demonstrations to showcase emerging capabilities in human-robot teaming, construction robotics and AI-enabled automation.

AROUND 30 LAB VISITS HOSTED

SELECTED HIGHLIGHTS



Meinhardt Australia & New Zealand

AUGUST 2026

Industry Visit – Structural Engineering

- Senior structural engineers explored HaRTCon's research, saw live robotics demonstrations, and discussed how robotics can support construction activities – particularly tasks that are difficult, unsafe or costly.
- A key focus was human-robot collaboration, combining human knowledge and decision-making with robotic capabilities to create safer and more productive construction.
- The group also experienced the immersive capabilities of the UTS Data Arena.



Particle Design Studio

AUGUST 2026

Industry Visit – Industrial Design & Product Development

- Daniel So, Principal Designer at Particle Design Studio, visited HaRTCon to explore how industrial design and product development play a critical role in translating emerging technologies into practical, real-world solutions.
- The discussion aligned with HaRTCon's mission to translate human-robot teaming research into real-world construction applications.



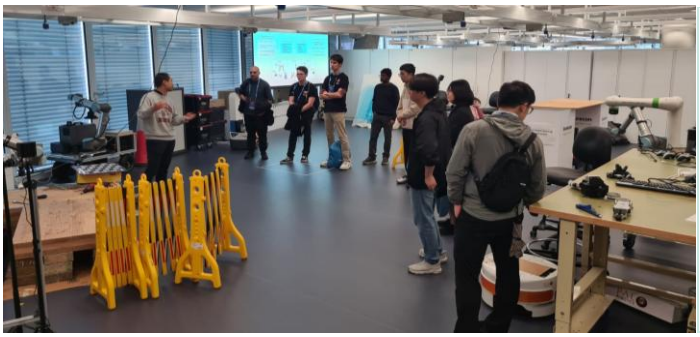
Silver Raven and UNSW

JULY 2026

Industry & Academic Visit

- Representatives from Silver Raven and UNSW visited HaRTCon for a lab tour, live demonstrations and discussions on robotics technologies and human-robot teaming in construction.
- The visit provided a valuable opportunity to exchange ideas, showcase innovative research, and explore potential future research and industry collaboration.

SELECTED HIGHLIGHTS (CONTINUED)



RSS Conference Lab Tours

JULY 2026

Academic Visit – Conference Participants

HaRTCon contributed to the RSS Conference through lab tours and live robotics demonstrations.

- 13 July: High school, undergraduate and master's students from the RSS Pathways Program visited the HaRTCon lab.
- 17 July: Multiple visits were held across morning and afternoon sessions as part of the broader RSS lab tour.



Independent High Schools STEM Teachers

JULY 2026

Academic Visit – STEM Educators

- STEM teachers from Independent High Schools visited HaRTCon as part of a UTS robotics and technology lab tour organised by A/Prof. Alen Alempijevic.

- The visit introduced the Hub's vision for human-robot collaboration in construction and showcased robotics research and demonstrations at UTS.



UTS Pro Vice-Chancellors Visit

JUNE 2026

Academic Visit – UTS Leadership

- Prof. Penny Martens and Prof. Anika Gauja, Pro Vice-Chancellors at UTS, visited the Robotics Institute labs.

- The visit showcased how HaRTCon's research aligns with UTS strengths and capabilities, with demonstrations across robotics and AI for construction and other real-world applications.



DIGIT Week Student Visit

MAY 2026

Academic Visit – School Students

- Students participating in the 2026 DIGIT Week program organised by the Rotary Club of North Ryde visited HaRTCon.

- The visit introduced robotics, engineering and emerging technologies, and how human-robot teaming technologies are being developed for safer, more sustainable and productive industries.



MTN Korean Broadcaster Visit

APRIL 2026

International Media Visit

- Korean broadcaster MTN visited HaRTCon to learn about Australia's AI and robotics capabilities ahead of the Korea–Australia Future Industry Forum.

- The visit included live robotics demonstrations and discussions on human-robot teaming and the future of construction using AI and robotic technologies.

Looking Ahead

HaRTCon has had a busy and productive establishment period, with the official launch, inaugural symposium, governance systems, communications channels, project agreements, seminars, visits and engagement activities now in place.

Several projects have recently commenced, while further project agreements and recruitments continue to progress.

As project teams grow and the research programs build momentum, we expect to see increased activity across the Hub, including more research outputs, demonstrations, industry engagement, student involvement and collaboration opportunities.

The journey has just begun, and the best is yet to come.

CONNECT WITH US

For collaboration, partnership opportunities, project enquiries or more information about HaRTCon, please contact us.



Distinguished Professor Dikai Liu
Hub Director
Dikai.Liu@uts.edu.au



Dr Mahdi Hassan
Hub Manager
Mahdi.Hassan-1@uts.edu.au

General enquiries
HaRTCon@uts.edu.au
hartcon.org

hartcon.org
linkedin.com/in/hartcon/
youtube.com/@HaRTCon