



**dyson**

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technology

# AI and the Future of Engineering Symposium

Date: Tuesday, 18<sup>th</sup> June 2024

Time: 9:00 AM - 4:00 PM

Location: Roundhouse, Dyson Institute of Engineering and Technology (DIET), Malmesbury, UK

[Web-link](#)

Objectives of the Symposium:

- Discuss the latest industry and academic findings on the potential of AI to transform the future of engineering.
- Explore strategies for integrating AI into engineering processes.
- Identify and address challenges in adopting AI in engineering.
- Facilitate collaboration between industry and academia to drive AI innovation.
- Showcase cutting-edge AI research and projects from PhD and PostDoc researchers.
- Provide a platform for emerging researchers to network with established professionals.
- Present Careers in Dyson for early-career researchers

Initial Agenda \*(Note that this agenda might slightly change):

8:30 - 9:15 AM: Registration

9:15 - 9:30 AM: Prof Peter Wilson, Dyson Institute of Engineering and Technology

Title: Welcome Notes

9:30 - 10:00 AM: Prof Tom Crick, Chief Scientific Adviser, Department for Culture, Media and Sport

Title: TBC

10:00 – 10:10 AM: Michael Groom, University of Oxford

Title: Safety for Mobile Manipulation for Domestic Robots

10:10 – 10:20 AM: Edward Stow, Imperial College London

Title: Using tensor contractions to bring automatic data layout optimisation to robotics

10:20 – 10:30 AM: Vassil Atanassov, University of Oxford

Title: Unsupervised Skill Discovery for Legged Robots

10:30 – 10:45 AM: Break

10:45 - 11:15 AM: Prof Manuch Soleimani, Bath University

Title: Application of AI in Engineering and Design: Opportunities in Research and Education

11:15 - 11:45 AM: Prof Shahrokh Shahpar, Rolls-Royce

Title: Novel Optimisation to Support Turbomachinery Digital Twin

11:45 - 12:00 AM: Tanzy Kelley and Jake Haworth, [Dyson Institute of Engineering and Technology](#)  
Title: What is the New Format of Engineering Education at Dyson Institute of Engineering and Technology?

12:00 – 1:00 PM: Lunch and demo of “VR-aided Engineering Design”

1:00 - 1:30 PM: Michael Mangan, [University of Sheffield](#)  
Title: Opteran: reverse engineering insect brains to provide the software mind enabling machines to move like natural creatures

1:30 – 2:00 PM: Prof Sabine Hauert, [University of Bristol](#)  
Title: Swarms for everyday environments

2:00 - 2:20 PM: Break

2:20 - 2:50 PM: Prof Damien Coyle, [Bath University](#)  
Title: Neurotechnology, Brain-Computer Interfaces and Human Augmentation Technologies

2:50 -3:20 PM: Stephen James, [Dyson](#)  
Title: Robot Learning for Advanced Domestic Robotics

3:10 - 3:35 PM: Prof Andrew Davison, [Imperial College London](#)  
Title: From SLAM to Spatial AI

3:35 – 3:50 PM: Moe Sanni & Antony Waldock, [Dyson](#)  
Title: Robotics in Dyson

3:50 - 4:00 PM: Closing Remarks

### **Travel and Maps**

Here are some options for travellers to consider:

**By Air:** The nearest international airport to the Dyson Institute of Engineering is Bristol Airport (BRS), approximately 30 miles away. From Bristol Airport, travellers can take a taxi or hire a car to reach the institute.

**By Train:** The Dyson Institute of Engineering is approximately 12 miles from Chippenham Station and 10 miles from Kemble Station.

**By Car:** Travelers coming by car can use [this pinpoint on the map](#). On arrival, please take the visiting route and park in the parking area. The roundhouse should be easily identifiable.

### **Contact**

If you have any problems or queries, please get in touch with Dr Mehdi Biroun at [Mehdi.Biroun@Dysoninstitute.ac.uk](mailto:Mehdi.Biroun@Dysoninstitute.ac.uk)

Or the organising committee at:  
[diai2024@dysoninstitute.ac.uk](mailto:diai2024@dysoninstitute.ac.uk)