



Welcome to the latest edition of the information sharing newsletter from the Maynooth University Commercialisation Office. Our goal is to share relevant market news and activities on the commercialisation of Maynooth University research. We hope you enjoy this newsletter.

Photo courtesy
of Maura Boyle.

**For more information visit:
www.maynoothuniversity.ie/commercialisation**



**DR JOHN
MCDONALD**

Dr John McDonald is a Senior Lecturer at the Maynooth University Department of Computer Science where he has held a full time position since 2001. He is a member of the Maynooth University Hamilton Institute, the Assisting Living and Learning (ALL) Institute, and a Funded Investigator (FI) in Lero, the SFI funded Irish Software Research Centre. His research has been funded under various research programmes from Science Foundation Ireland, the EU, Enterprise Ireland, and the Irish Research Council. Drawing on the fields of computer vision, robotics, machine learning, and artificial intelligence, his research targets the development of spatial perception and intelligence in autonomous mobile robotics and intelligent devices. His work on the creation of algorithms for real-time visual mapping (*a.k.a.* visual SLAM) for long-term autonomy has resulted in numerous publications including media interest from BBC's Click, the Discovery Channel Canada, Bloomberg News, wired.co.uk, and an MIT News spotlight.

His group has a strong track record of collaboration working with a number of the world's leading institutions in robot perception, including MIT, Imperial College

London, TU/e, the University of Zaragoza. In 2013 his group developed a new approach to dense visual mapping in collaboration with MIT, resulting in a granted US patent application. This technology was subsequently licensed to REIVR Ltd., a MaynoothWorks based Spin-in developing novel sensor fusion platforms, combining wireless positioning systems, visual mapping and computer vision based deep learning.

He is currently Principal Investigator on a LERO project which is part funded by Valeo Vision Systems, the world's leading provider of driving assistance systems. The project's aim is to develop algorithms that enable autonomous vehicles to operate over very long time scales, with significant variation in the environment (e.g. changes due to weather, season, time of day, and dynamics at varying temporal scales).

Backed by a recent SFI Infrastructure Award, he is also currently collaborating with Dr. Rudi Villing to develop a state of art robotics laboratory jointly between the MU departments of Computer Science and Electronic Engineering.

REALISE R&D POTENTIAL WITH ENTERPRISE IRELAND INNOVATION SUPPORTS

“Do I have a technology or service idea that addresses an unmet need which a potential customer would be willing to pay for?”

If the answer is **yes**, then work with Maynooth University Commercialisation Office to discover how our researchers can help your business succeed.

Leverage Enterprise Ireland innovation supports with Maynooth University as a partner to solve hard technical questions, enabling your company to build better products.

- Use the **Innovation Voucher** to explore potential solutions and opportunities to a key technical problem
- Use the **Innovation Partnership** to develop and build core product solutions and opportunities to a key technical problem

MAYNOOTH UNIVERSITY AS YOUR KNOWLEDGE PROVIDER

Use the Innovation Partnership to develop and build core product innovation.

Captured by 6 broad themes, our research spans the natural Sciences, Social Sciences, Arts and Humanities, Business and Law, Computer Science and Engineering.

Maynooth University research institutes and centres are active participants in national and international research collaborations putting them at the forefront research excellence and knowledge creation.

Please read the full article here

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1

PEOPLE,
PLACE AND
ENVIRONMENT

2

SOCIAL AND
ECONOMIC
TRANSFORMATIONS

3

HUMAN HEALTH

4

MATHEMATICS,
COMPUTATION AND
COMMUNICATIONS

5

HUMANITIES
IN PRACTICE:
SOURCES,
RESOURCES AND
DISCOURSES

6

HUMAN CULTURES,
EXPERIENCE
AND CREATIVITY