# Curriculum Vitae – Dr Iain Haughton

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Research Scientist with over seven years' experience in autonomous robotic manipulation, developing novel algorithms, designing hardware, and initiating the Dyson Robot Learning Lab in London.

# EDUCATION AND AWARDS

2011 - 2015 PhD in Particle Physics, CERN / University of Manchester STFC Scholarship

2007 - 2011 Masters in Physics, University of Manchester, UK First Class Honours

2021 - 2022 EPSRC Award – for fostering business and academic research collaborations

### Professional Experience

#### Dyson Robot Learning Lab

Lead Research Scientist

2022 - Present London. UK

Enabling robots to acquire practical skills and behaviours using data-driven approaches, including:

• reinforcement learning • imitation learning • unsupervised representation learning

#### Imperial College – Dyson Robotics Lab

2020 - 2022

Lead Research Scientist - Mentor: Andrew Davison (FRS)

London, UK

Secondment. Developing algorithms for real-time localisation, mapping and scene understanding.

#### Dyson Technology Limited

2017 - 2020

Senior Research Engineer

Malmesbury, UK

Future Robotics team. Experience in all aspects of robot design and control:

♦ mechanical design ♦ grasping and tactile sensing ♦ computer vision ♦ motion planning

#### CERN / Christie Cancer Hospital

2015 - 2017

Postdoctoral Research Associate

Manchester, UK

Funded to develop novel particle detector for proton therapy.

#### University of Oxford

Summer 2015

Research Intern - Department of Engineering Science

Oxford, UK

Studied precision engineering and solid-state sensor fabrication.

#### PhD in Particle Physics

2011 - 2015

University of Manchester – Advisor: Terry Wyatt (FRS)

Manchester/Geneva

Data analysis of the Higgs boson decay, aiding in its discovery and subsequent Nobel Prize.

## SKILLS

Management

Skilled in Agile principles, with experience managing and leading a team of engineers

Research Programming Published in peer-reviewed conferences and journals; delivered talks across disciplines Proficient in ROS, **Python**, C++, C. Proficient in **PyTorch**; familiar with Tensorflow

 ${\bf Tools}\\ {\bf Hardware}$ 

Expertise in simulators, real-world robots, Docker, large-scale training on GPUs Professional CAD (Siemens NX) for mechanical, electronic and sensor design

Workshop Experience in milling and turning, high-energy lasers, high-radiation environments

Miscellaneous