## Curriculum Vitae – Dr Iain Haughton

Researcher with over seven years' experience developing, evaluating, and scaling state-of-the-art ML across physics, medicine, and robotics. My passion lies in crafting cutting-edge AI to drive real-world innovation.

## 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 c	ollaborations

## PROFESSIONAL EXPERIENCE

Dyson Robot Learning Lab Lead Research Scientist	2022 - Present
Enabling robots to acquire practical skills and behaviours using data-driv $\diamond$ Reinforcement learning $\diamond$ Imitation learning $\diamond$ Unsupervised	
Imperial College – Dyson Robotics Lab	2020 - 2022
Lead Research Scientist – Mentor: Andrew Davison (FRS)	London, UK
Secondment. Developing algorithms for real-time localisation, mapping a	nd scene understanding.
Dyson Technology Limited	2017 - 2020
Senior Research Engineer	Malmesbury, UK
<ul> <li>Future Robotics team. Experience in all aspects of robot software design.</li> <li>♦ Large scale system design.</li> <li>♦ Deep learning for computer vision.</li> </ul>	
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 subset	quent Nobel Prize.

## Skills

Management	Skilled in Agile principles, with experience managing and leading a team of engineers
Research	Published in peer-reviewed conferences and journals; delivered talks across disciplines
Programming	Proficient in ROS, <b>Python</b> , C++, C. Proficient in <b>PyTorch</b> ; familiar with Tensorflow
Tools	Expertise in simulators, real-world robots, Docker, large-scale training on GPUs
Hardware	Professional CAD (Siemens NX) for mechanical, electronic and sensor design
Workshop	Experience in milling and turning, high-energy lasers, high-radiation environments

MISCELLANEOUS