

Daniel Peppe

PhD Student • Computational wave physics • Biomedical ultrasound

✉ daniel.peppe24@imperial.ac.uk  daniel-peppe  danielpeppe

EDUCATION

IMPERIAL COLLEGE LONDON | PHD STUDENT

2025 – Current | London, UK

- Researching quantitative ultrasound applied to skin with applications in skin cancer imaging and wound healing. Working in the Imperial NDE Group with Dr Peter Huthwaite.

UNIVERSITY OF BRISTOL | MENG MECHANICAL ENGINEERING WITH A YEAR IN INDUSTRY

2020 – 2025 | Bristol, UK | First Class Honours

- Specialisations: Data-driven physical modelling, multivariable and non-linear control, ultrasound, finite element analysis, sustainability.
- Bachelor's dissertation (link): Developed novel technique for generating ultrasonic testing datasets to train machine learning models to predict porosity in composite materials.
- Master's dissertation: Modelled the compressive behaviour of syntactic foam using machine learning (RF, SVR, GPR, ANN), with robust validation and extensive evaluation.

EXPERIENCE

RIVEN INDUSTRIES LTD | MECHANICAL ENGINEER

Sep 2025 – Oct 2025 | London, UK |  Riven Industries Ltd

- Worked with the Direct Air Capture (DAC) team. Responsible for assembly of carbonation module, and designing and manufacturing custom components that were integrated into final DAC system.

BRISTOL FORMULA STUDENT AI | CO-FOUNDER

Sep 2024 – Sep 2025 | Bristol, UK |  bristol-fsai

- Co-Founded and led team to compete at the international Formula Student AI 2025 competition, achieving 16th place out of 26 teams in our first year.
- Developed team from ground up and acted as technical lead for autonomous system architecture, planning and control, and hardware integration in ROS 2 Galactic.
- Oversaw all aspects of team operations including administration, DevOps, finance, marketing, recruitment, and strategy.

ROLLS ROYCE PLC | ENGINEERING & TECHNOLOGY INTERN

Jun 2022 – Jul 2023 | Derby, UK

- Worked in Rolls Royce's Central Manufacturing team.
- Developed the commercialisation strategy and IP framework for a novel manufacturing technology while coordinating technical, non-technical and external teams.
- Developed group-wide manufacturing sustainability capability, conducted Lifecycle Assessment (LCA) studies and presented findings to global communities.

CORE SKILLS

- Data-driven physical modelling
- Programming
- Robotics
- Design and Manufacturing
- Project Management and Leadership

PROGRAMMING

LANGUAGES

Proficient:

Python • MATLAB

Experienced:

C • C++ • Bash

Familiar:

HTML • CSS • JavaScript

LIBRARIES/Frameworks

ROS 2 • PyTorch • Scikit-Learn

TOOLS/PLATFORMS

Git • Docker • VMBox • Linux

ACHIEVEMENTS

- Raised £1000 for The Hepatitis C Trust hiking the GR20 in Corsica.
- Sailed the Atlantic from Bermuda to Gibraltar as deckhand in a crew of 5.

REFERENCES

Dr Peter Huthwaite, Reader in Mechanical Engineering, Imperial NDE Group

✉ p.huthwaite@imperial.ac.uk

Professor Paul Wilcox, Professor of Dynamics, University of Bristol

✉ P.Wilcox@bristol.ac.uk