
SUMMARY

Motivated undergraduate physicist with interdisciplinary background in pure and applied physics. Currently undertaking a summer research placement at the Centre for Astronomy, University of Galway. Strong focus on instrumentation, computation, and team-working. Experienced in both industrial and academic environments, driven by curiosity and a passion for solving challenging, real-world problems.

EDUCATION & RESEARCH

BSc Physics & Instrumentation — Atlantic Technological University (*Current*)
Third-year undergraduate, due to graduate in 2026. [Provisional 1:1 GPA]

BA Physics (non-graduate transfer) — Trinity College Dublin (*2019–2023*)
Completed two years before transferring. [Achieved 2:1 average]

Research Placement — Centre for Astronomy, University of Galway (*Summer 2025*)
Simulating observations for the Extremely Large Telescope and the MORFEO instrument.

KEY MODULES

- Quantum Mechanics
- Astrophysics
- Electromagnetism
- Medical Imaging
- Electronic Instrumentation

TECHNICAL SKILLS

- Python, MATLAB
- LabVIEW, Simulink
- Origin
- LaTeX, Git, Office Suite
- Command Line (WIP)

WORK EXPERIENCE

Boston Scientific — Product Builder (2023–2024)

Full-time employee in the SDC division, working on the precision assembly of catheter components in clean room conditions. Cross-trained in multiple roles with focus on quality and detail.

Brandface — Brand Ambassador / Team Lead (2022–2023)

Part-time employee working on the customer-facing promotion of products; managed logistics and small teams during campaigns.

ASSOCIATIONS

- Institute of Physics
(Associate Member)
- ATU Astronomy Society
- DU Philosophical Society
- DU Physics Society (Former)

PORTFOLIO WORK

- Surface Profilometer
- Fridge Sensor Prototype (WIP)
- General & Physics Essay Work
- GitHub:
<https://mark-t-roe.github.io/>

REFERENCES

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