

Physics undergraduate at the University of Sheffield. Skilled in programming and electronics, with a passion for interesting problems. Keen to further develop skills applying theoretical principles to reach practical solutions - particularly for optical radiometric devices. Equipped to deliver solutions in an optical design and experimental R&D setting, using both physics based and practical skills.

Employment

June 2023 - present **Design Physicist Intern**, *AMETEK Land Instruments International*

- Advanced R&D, using radiometric theory and simulation to prototype and diagnose Cassegrain optical devices. For example, reducing glare using baffled surfaces.
- Crafted bespoke integrating spheres and hot plates for uniform thermal imaging, saving thousands of pounds, requiring practical ability to achieve theoretical goals. Currently used across the globe.
- Analysed and visualised 40,000+ internal data files, resulting in massive quality control improvements by implementing changes to instrument parameters and thresholds, assisting the delivery and quality of 7 figure orders.

I am proud of this opportunity to contribute to Land, world leaders in non-contact temperature measurement solutions, furthering innovation and performance.

October 2022 - present **Volunteering**, *Student Staff Committee, University of Sheffield*

Volunteering for the Student Staff Committee, facilitating feedback from students to lecturers & faculty. Demands clear and effective communication, and good interpersonal understanding.

Education

- 2021 - present **BSc Physics with Year in Industry**, *University of Sheffield, Predicted First Class*
- 2019 - 2021 **A levels**, *The Sixth Form College, Colchester, Physics (A) Maths (A) Electronics (A) Chemistry (A)*
- 2014 - 2019 **9 GCSEs, 1 BTEC**, *Maltings Academy, Average 7.6 with 9 in Physics. Dist* in Business.*

Technical and Personal skills

- **Programming Languages:** Python (numpy, pandas, etc.), JavaScript/HTML/CSS.
Also familiar with C (& other low level), Matlab, VBA.
- **Industry Software:** Excel (& macros), Tableau, Autodesk Fusion 360, Adobe CS/CC.
- **General Business Skills:** Documentation and presentation, Works productively with a team, Understanding of business aims and objectives.

Interests and extra-curricular activity

- Data Analysis projects; using APIs & data banks (e.g. World Bank Open Data) with Python to investigate interesting/useful datasets.
- Electronic projects, using Arduino, and creative LED signage.
- 3D Printing & CAD; using Fusion 360 for 3D printing and modelling projects.
- RC Hobbyist; building racing drones.
- Musician; play Saxophone, Piano and Bass guitar. Toured Germany with jazz orchestra.
- Sports; enthusiastic about field hockey and squash.