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I am interested in high-energy transient astrophysics, particularly in the radio domain, to map and investigate the nature of the progenitors. I am proficient in data visualisation and analysis in Python and have experience running simulations in Fortran.

Education

University of St Andrews, UK | Astrophysics Integrated Masters (Hons) **2020 - Present**

Expected to graduate with a strong 2:1

Relevant Modules: Advance Data Analysis, Monte Carlo Radiation Transport Techniques, Knowledge Discovery & Datamining, Computational Astrophysics & Physics, Extragalactic Astronomy, Observational Astrophysics, Data Handling, Physics of Nebulae and Stars 1&2

Work Experience & Courses

Synthetic Optic Group, University of St Andrews **June - August 2024**

Research Intern - Supervisor: Prof Andrea Di Falco

- Developed a procedure to 3D print microfluidic devices on glass and treated chips on DLP printers
- Designed test prints for micron-scale structures to fine-tune print parameters for different resins
- Taught and advised group members on operating and maintaining SLS and DLP printers

University of St Andrews Observatory **May - June 2024**

Research Intern - Supervisor: Dr Alexander Scholz

- Perform precise polar and alignment on the robotic telescope to achieve sub-1 minute tracking
- Update and integrate control software to the latest operating versions
- Perform fine-tune adjustments to the finderscope, focuser, and camera alignment

Laidlaw Scholarship Leadership Project - Timothy Smith Network **July - August 2023**

Coding Assistant Instructor

- Designing and teaching coding and Arduino to over 30 middle and high school students
- Implementing Firmata to streamline teaching material for coding and microcontrollers
- Supervise students on final projects in coding and 3D modelling

Laidlaw Scholarship Research - Galaxies Group, University of St Andrews **May - December 2022**

Scholar/Research Intern - Supervisor: Dr Juan V. Hernández Santisteban

- Research title: Identifying active galactic nuclei for the SPHEREx observatory
- Cross-matched ~2.6 million sources from archival sky surveys using ADQL
- Results from the work have been accepted by the Las Cumbres Observatory for further studies

Physics & Math Tutor - Phupha Tutor **July 2021 - Present**

Tutor

- Tutored over 16 students in Europe, Asia, and Oceania regions
- Curriculum taught: Pre-IGCSE Maths and Physics, IGCSE Maths and Physics, A-Levels Maths and Physics, BMAT Physics, NCEA

Workshop Attendee - National Astronomical Research Institution of Thailand (NARIT) **July 2020**

Student Attendee - Advance Engineering Workshop

- Studied the available technology for the development of the engineering projects conducted by NARIT
- Observed the technology and construction of the Thai National Radio Telescope
- Visited the production plant of the mirror coating machines designed for the Cherenkov Telescope Array

Astronomy Data Handling Python Course - Newton Fund Program/NARIT **October 2019**

Attendee

- Attended lecture-style talks on Astrophysical concepts ranging from planetary orbits to stellar evolution
- Focused on Python coding for data visualisation and handling of CSV formatted astronomical data
- Created stellar structure simulations using astronomical data from ASTROHUB

Intern

- Trained in basic astronomical observation and how to set up different types of telescopes
- Trained on SalsaJ Photometry Software and wrote a report on finding the distance to the M100 Galaxy
- Shadowed Astrophysicists and discussed how their work is being conducted at the institution

LEADERSHIP ROLES

Lead Organiser - St Andrews Interdisciplinary Science Conference

March 2023 - Present| Organise and chair meetings and act as the primary point of contact

President - University of St Andrews Astronomical Society

March 2023 - March 2024| Chair committee meetings and represent the society.

School Ambassador - University of St Andrews, School of Physics and Astronomy

May 2021 - Present | Represent the school at official events.

Senior Observing Director - University of St Andrews Astronomical Society

May 2022 - March 2023| Operate the telescopes during observation sessions for the society.

Event Convenor - University of St Andrews Astronomical Society

May 2021 - May 2022| Organise and run events for the society.

Event Officer - University of St Andrews Thai Society

May 2021 - May 2022| Assists the Event Director in organising and running events.

Freshers Representative- University of St Andrews Astronomical Society

September 2020 - May 2021| Promote and inform Freshers students of the society.

First Year Astronomical Student Representative - University of St Andrews

September 2020 - December 2020 | Represent the students in the Astronomy modules.

Award and Qualification

Laidlaw Foundation Research and Leadership Scholarship

February 2022 | Awarded to undergraduate students to undertake a research and leadership project

University of St Andrews Dean's List

June 2021 | Awarded to Students with a mean grade over 16.5 on the university's non-linear scale

June 2022 | Awarded to Students with a mean grade over 16.5 on the university's non-linear scale

Bronze, Silver, and Gold Level Completion - Duke of Edinburgh International Award

June 2020 | Awarded to students committed to a wide range of activities during their high school

High School Physics Prize

June 2020 | Awarded to a student with the highest score in physics across the year

BPO Bronze Medal

June 2020 | Awarded to students with a minimum grade in the BPO

UKMT Silver Award

June 2019 | Awarded to students with a minimum grade in the UKMT Challenge

Others

Professional Membership: Fellow of the Royal Astronomical Society, Associate Member of the Institute of Physics

Computer Skills: Basic Java, OOP, Data Handling, Python, SQL/ADQL, LaTeX, Fortran, TOPCAT

Language: English (Fluent), Thai (Fluent), Japanese (Elementary Beginner)

Conference Attended: National Astronomy Meeting 2022, School of Physics and Astronomy Burn Conference