

# Jack Lloyd-Walters

MPhys MInstP FRAS

## Contact

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United Kingdom

## Platforms

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## Languages

English Native

Japanese Beginner

## Programming

Python Expert

$\text{\LaTeX}$  Advanced

Markdown Advanced

YAML Advanced

Groovy Intermediate

HTML/CSS Intermediate

Javascript Intermediate

Kerboscript Intermediate

Make Intermediate

SQL Intermediate

Bash Mediocre

## Hobbies and

## Interests

### Space & Spaceflight

Natural or artificial, if it's found outside of earth's atmosphere, I probably like it. Exoplanets and space-probes are my favourite though.

### Gaming

I Love Factorio, Stellaris, modded Minecraft, and Kerbal Space Program.

### Programming

I build watch faces for my FitBit Versa, occasionally work on my custom programming language, and am slowly building a flight computer for Kerbal Space Program.

## Experience

### Canonical

Present  $\leftarrow$  2023-05  
2023-05  $\leftarrow$  2022-06

Software Engineer I  
Associate Software Engineer  
Joined as part of the graduate fast track programme

MAAS (*Metal-As-A-Service*)  
MAAS (*Metal-As-A-Service*)



### B&M

2019-10  $\leftarrow$  2017-10

Floor Staff  
Primarily worked on Fast Moving Customer Goods, Unloading deliveries, and Warehouse organisation

## Education

### University of Portsmouth

2022-05  $\leftarrow$  2018-09

MPhys Physics, Astronomy, and Cosmology *First Class Honours*  
■ First year mean grade of 76.7%, Final year mean grade of 79.2%  
■ Masters thesis combining computational modelling, first hand observation, and supplemental data to measure exoplanet transits. Developed analytical models of transit timing variation to investigate the orbital properties of non-transiting planets. Results were summarised with a 6000 word dissertation, 10 minute presentation/discussion, and scientific poster.  
■ Bachelors thesis utilising computational modelling and signal processing to identify and model glitch events within the LIGO data set. Results were summarised with a 5000 word dissertation, 10 minute presentation/discussion, and LaTeX Compatible result list.



### AiCore

2022-06  $\leftarrow$  2022-01

Ai and Data Engineering *Certified in the practical application of AI and Data Engineering*



### Peter Symonds College

2018-06  $\leftarrow$  2016-09

A-Level *Physics (A), EPQ (A), Maths (B), Further Maths (D), AS-Chemistry (A)*



### City of Portsmouth Boys' School

2016-05  $\leftarrow$  2011-09

GCSE *9 GCSE's A\* to B Including Science, Computer Science, Maths, and English*

## Memberships

### British Astronomical Association

Present  $\leftarrow$  2022

Member



### Institute of Physics

Present  $\leftarrow$  2022

Member

*Granted the use of the post-nomen 'MInstP'*



### European Astronomical Society

Present  $\leftarrow$  2020

Member



### Royal Astronomical Society

Present  $\leftarrow$  2020

Fellow

*Granted the use of post-nomen 'FRAS'*



## Awards

2022-05

Graham Bryant Prize for Best Observatory Project  
First recipient of the award to honour the late Graham Bryant for my Masters thesis

*University of Portsmouth*

## Projects and Publications

Ongoing CI/CD for external MAAS GitHub Projects *Canonical*

Ongoing Metal As A Service *Canonical*

Ongoing Season Clock  
Fitbit Clock face showing the seasons on your wrist

2023-09 'Variations on an Exoplanet theme' webinar *British Astronomical Association*  
Computational Modelling of Transit Timing Variations

2023-03 MAAS Ansible Playbooks *Canonical*

2022-05 Lloyd-Walters et al. 2022 *University of Portsmouth*  
Masters: 'Determining The Parameters of Exoplanetary Candidates From Transit Timing Variations.'

2022-05 Data Science Project *AiCore*  
Combined Data science and AI Pipeline for outcome prediction

2022-03 Data Collection Pipeline *AiCore*  
Industry grade data collection pipeline on AWS using Docker, Selenium4, Prometheus, and Grafana.

2022-02 Fitbit Pokétech  
A Fitbit clock-face in the style of the Pokémon Generation IV Pokétech.

2022-02 Computer Vision Rock-Paper-Scissors *AiCore*  
Trained a computer vision model with TensorFlow to play Rock-Paper-Scissors in real time using a webcam and openCV

2021-05 Lloyd-Walters et al. 2021 *University of Portsmouth*  
Bachelors: 'Distinguishing Intermediate Mass Black Hole Mergers From Short Duration Glitches.'

2017-12 Lloyd-Walters J. 2017 *Peter Symonds College*  
Extended Project: 'Is There A Possibility of Extrasolar Habitation?'