

Rokas Žemaitis

Edinburgh, United Kingdom

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Work Experience

Senior Scientist/Software Developer

United Kingdom

○ University of Edinburgh

December 2024–Ongoing

- Contributed to the delivery and integration of software into the UK Science Data Centre (SDC) Euclid Production Pipeline;
- Participated in code reviews, delivered constructive feedback which enhanced code quality and fostered good coding practices among the development team;
- Maintained Docker containers to support GitLab CI pipelines, ensuring reliable and efficient execution of automated tests.

Computing Infrastructure Officer

United Kingdom

○ University of Edinburgh

July 2024–November 2024

- Assisted in the delivery of the network infrastructure components for School's data-centres (servers, switches, routers);
- Developed and maintained Python software tools to effectively manage the various aspects of the School's network, including custom libraries for ad-hoc REST API access;
- Enhanced the School's system software infrastructure by upgrading legacy TCL scripts to Python, significantly improving system efficiency and maintainability;
- Produced documentation and wiki pages for users of the School's network.

Postdoctoral Research Associate

United Kingdom

○ University of Edinburgh

June 2023–May 2024

- Collaboratively developed quality control tools for a Python-based image reduction data pipeline hscPipe;
- Engaged in workshops and conferences to showcase my own research findings and established valuable collaborations with international research teams;
- Documented Python and Linux shell script code to ensure accessibility and user-friendliness for future projects of my research team.

PhD Astronomy

United Kingdom

○ University of Edinburgh

September 2018–May 2023

- Reduced high-volume (10 TB) raw image data using Python data reduction pipelines and SQL-based file management structures;
- Extensively worked on observation archives for data acquisitions;
- Created a Python ellipse fitting class that significantly outperforms the publicly available implementation, running 300 times faster;
- Collaborated on projects in Extragalactic Archaeology with associate teams in UK, France, Canada, Japan and the USA.

- **Software Development Intern** **United Kingdom**
 - *Space Intelligence Ltd* *May 2021–July 2021*
 - Developed a robust forest conservation data acquisition system in Python by improving upon an existing data extraction process from a public JavaScript-rendered front-end dataset;
 - Implemented an automated end-to-end pipeline that systematically scrapes data, extracts relevant details from PDF project documents, and updates the local database.

Education

- **University of Edinburgh** **United Kingdom**
 - *PhD Astronomy* *September 2018–May 2023*
 - Completed a PhD degree in Extragalactic Archaeology;
 - IT Representative for the postgraduate student cohort;
 - Presented projects in international conferences in the UK, Spain and Croatia.
 - **University of Edinburgh** **United Kingdom**
 - *MPhys Astrophysics, 2:1 Class* *2013–2018*
 - Attended Python, Java and C development courses alongside my core Maths and Physics curriculum;
 - Diploma of Excellence awarded for 1st year of studies.

Technical and Personal Skills

- **Programming Languages:** Proficient in Python (7 years, Data Science Stack: NumPy, SciPy, pandas). Fair ability with: C, C++, Java, SQL, R (Shiny), Linux shell scripting, Git.
- **Microsoft Office:** Extensive experience with Word, Excel, PowerPoint.
- **Languages:** Lithuanian (native), English (fluent), German (fair).
- **Settled Status:** Full right to work in the UK.
- **Driving Licence:** Category B.

Other Experience

- **IT Representative** **United Kingdom**
 - *University of Edinburgh* *September 2019–September 2020*
 - Provided valuable support to fellow PhD students by addressing diverse IT-related challenges with Linux machines;
 - Diagnosed and rectified PC boot-up issues arising from flawed software installations;
 - Helped maintain an automated implementation to minimise storage memory loads.
 - **Lithuanian Society Treasurer** **United Kingdom**
 - *University of Edinburgh* *May 2019–May 2020*
 - Maintained a written record of the society's budget;
 - Hosted the weekly pub quiz and managed venue bookings;
 - Organised social events and designed banner art for promotions of events.