Radin (Sayyed) Rassouli

TW8 9GD, UK • +44 7576 246457 • Radinrassouli@gmail.com • LinkedIn • Right to work in the UK (no sponsorship required)

EDUCATION

MSci in Quantum Fields & Fundamental Forces (Distinction in the Research Project), **Imperial College London**, UK — Sep 2024 – Sep 2025

BSc in Physics (First Class Honours), Royal Holloway University of London, UK — Sep 2021 – Jun 2024

NOTABLE PROJETCS

Document processing **automation** with **Azure Document Intelligence** and **Azure OpenAI**, (Python, AI, LLM) — Feb 2026
SCIRIS, London

- Delivered a no breaks automated process that completes extraction and database entry of data in about 37 seconds per project, cutting the previous effort by more than **80%**.

UK Greenhouse Gas Emissions Trend and Forecasting (Python), GitHub — Jan 2026
Personal Project

- Built a reproducible pipeline to clean the ONS atmospheric emissions dataset (1990 to 2023), visualise annual UK total GHG emissions, and forecast five years ahead, benchmarking a naive baseline against **ETS** (additive damped trend) and **ARIMA** using a five year holdout backtest (2019 to 2023).

Monte Carlo Simulation of X-ray Photon Transport (Python) — 2023 – 2024
Royal Holloway, University of London

- Designed and implemented a **Monte Carlo** engine in Python to simulate photon–matter interactions, sampling stochastic paths and interaction events.

Particle Motion Near Black Holes: Schwarzschild, Kerr and Beyond — 2023 – 2024
Royal Holloway, University of London

- Derived relativistic geodesic equations and implemented **stochastic processes** to study particle trajectories in strong-gravity regimes.

Satellite Radar Altimetry Uncertainty Analysis Platform — Jun 2023 – Aug 2023
National Physical Laboratory, UK

- Developed a Python/Django interactive app to model and document end-to-end uncertainty propagation in satellite radar altimetry re-tracking implementing **linear algebra**.

TECHNICAL SKILLS

- **Mathematical:** stochastic calculus, time series analysis, measure probabiliy, advanced linear algebra, tensor calculus.
- **Programming & software:** Python (NumPy, SciPy, pandas, Matplotlib, Jupyter), C++, C, SQL, Bash, HTML, CSS, LaTeX.
- **Data analysis & modelling:** probability, statistics, regression-style modelling, Monte Carlo simulation, uncertainty quantification, ODE/PDE numerics, numerical optimisation; experience analysing noisy experimental and simulated datasets.
- **Tools & platforms:** fluent with Linux systems and command-line workflows; experienced with Git, Jupyter Notebooks/Jupyter Book, Excel (filters, sorting, pivot tables, basic dashboards), PowerPoint and Word/LaTeX for technical reporting and documentation.

WORK EXPERIENCE

Data Enrichment Analyst — Feb 2026 – Present
SCIRIS Group, London UK

- Used Python (azure.ai.documentintelligence, azure.core.credentials, pandas, openai.AzureOpenAi) to develop an end to end document ingestion workflow in Python: CMAP/HubSpot login, automated document retrieval, text extraction to a unique TXT file, LLM based context extraction, database update.
- Combined deterministic scripting with LLM flexibility to extract target information reliably across varied document formats.

Research Team Member – Satellite Radar Altimetry Uncertainty Analysis — Jun 2023 – Aug 2023
National Physical Laboratory, Teddington, UK

- Used Python (NumPy, SciPy, pandas, Jupyter, Django) to implement reusable workflows for propagating and reporting uncertainties in satellite radar altimetry re-tracking.
- Analysed complex measurement chains, identifying key drivers of uncertainty and improving transparency of end-to-end sea-surface height retrievals.
- Produced technical documentation and visualisations to communicate the uncertainty framework to researchers, metrology experts and future platform users.

OTHER INFORMATION

- **Languages:** English (fluent); Italian (native); Farsi–Persian (native); Japanese, Russian (basic).
- **Leadership & outreach:** SEPnet Ambassador for the Physics Department (2022–2024), presenting to prospective students and parents about physics degrees and career paths across the UK; volunteering at Eco Fair (Egham, 2022) and Associazione San Francesco d'Assisi (Martina Franca, 2020).
- **Interests:** martial arts (Kendo, Jiu Jitsu, Iaido, Wing Chun); music (piano, violin, bass guitar); technical DIY projects (electronics, 3D printing, embedded systems).