## Amrit Bath

ami.k.bath@gmail.com | +447804667341 | LinkedIn Profile | My Website | SL4 2LP

Interdisciplinary researcher exploring the future of sustainability, generative AI, digital beauty and accessible education. Experience in research, innovation, and public speaking.

#### **EDUCATION**

### The University of Manchester: First Class (Hons) Physics BSc

2021-2025

Studied advanced physical principles, with a specific focus on earth science and sustainability. Optimised Python and C++ skills through programming modules and lab projects, analysing particle decay from the LHC and observational work using the 42ft telescope at Jodrell Bank Observatory. Pursued interdisciplinary coursework and industry collaborations in the intersection of technology and beauty, including modules in Al-human interaction. My dissertation focusing on smart textiles and sustainability enhanced modelling skills through the application of computational techniques.

## Sir William Perkins School, Chertsey

2014-2021

A-Levels: A\* in Physics, A in Maths, B in Chemistry. GCSEs: 9-6 in 10 subjects including English, Maths, and triple Science.

#### **TECHNICAL & CREATIVE SKILLS**

- Programming: Python, C++, ROOT, Markdown.
- Digital Fashion Tools: Clo3D, Style3D.
- Video Editing: Adobe Premiere Pro, After Effects.
- Data Analysis: Excel, Jupyter Notebook, LaTeX.
- Communication: Public speaking, academic writing, panel moderation.
- Research & Collaboration: Scoping reviews, interdisciplinary teamwork, curriculum codesign.

### **RELEVANT EXPERIENCE**

## **Outreach and Communications, ICAI**

2025

Organised communications and partnerships with relevant persona. Conducted social media research, design and content. Focusing on collaborations which foster the message of inclusion and ethical AI usage.

# Co-Creation Panel Member, UoM

2025

Collaborating with faculty and peers to redesign and develop the final-year Meteorology and Forecasting course, with a focus on accessibility, neurodivergent inclusivity, and deep-learning assessment structures.

### Research & Engagement Contributor Analyst, Al Edify

2024-2025

Supported ethical AI development by contributing student-centred insights, collaborating with ambassadors partners to embed ethical AI into institutional curricula.

## L'Oréal Brandstorm National Semi-Finalist, L'Oréal

2024-2025

National semi-finalist in L'Oréal Brandstorm. Designed the pitch for an Al-driven grooming app targeting Gen Z males, integrating skin scanning tech, gamified engagement, and ethical Al principles. Delivered market-ready pitch to L'Oréal executives.

### Research Intern, UoM

2024

#### The Impact of Physical Fabric Properties on Virtual Garment Creation

Engineered textile tests and performance evaluations, creating a dataset to compare physical fabric properties with digital garment development software. Developed virtual and physical garment samples, contributing to sustainable fashion research. Applied Python for data analysis and modelling. Applied advanced digital prototyping using Clo3D and Style3D.

## Panel Speaker, UoM T&L Conference

2024

### "The Future of Teaching and Learning in Higher Education"

Invited as a cross-disciplinary student speaker at the annual UoM Teaching & Learning Conference plenary, joining academics and industry leaders from institutions including MMU, FACE, and Aunty Agency. Contributed to discussions on the ethical integration of AI in education, emphasising personalised learning, accessibility, and the student role in shaping adaptive AI tools.

## Research Intern, UoM

2024

#### Research Intern: AI in Fashion: A Scoping Review

Completed a scoping review of AI applications in fashion, focusing on generative AI, and co-authored "The Impact of AI and 3D Digital Tools on Product Development" in The Future Priorities for Design, Branding, Marketing, and Retail: The Era of Technology and Sustainability (Emerald Publishing) Gallery, C., Chrimes, C., Bath, A. (2025).

# Laser Research Intern, Tokamak Energy

2024

Analysed Python algorithms to track laser stability, enhancing temperature measurement accuracy in the tokamak.

#### Other Work Experience

Physics Tutor – Delivered one-to-one A-level and GCSE physics tutoring.

Waitress and Hotel Porter – Developed customer service and time management skills.

Treasurer, UoM Make-Up Society – Managed budgeting, sponsorship, and event planning.

#### Interests and Activities

Travelling, rock climbing, creative arts and crafts including sustainable fashion prototyping. Qualified makeup artist.

## References Available on request.