Amrit Bath

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Interdisciplinary researcher exploring the future of generative AI, digital fashion and accessible education, with experience across research, innovation, and public speaking.

EDUCATION

2021-2025: Physics BSc The University of Manchester

- Studied modules including quantum mechanics, relativity, statistical processes, thermodynamics, particle physics, and astrophysics.
- Optimised advanced Python and C++ skills through programming modules and lab projects, including analysis of particle decay data from the LHC and observational work using the 42ft telescope at Jodrell Bank Observatory. Further enhanced modelling skills through the application of computational techniques in my dissertation project.
- Pursued interdisciplinary coursework and industry collaborations exploring the intersection of technology and fashion, including a dissertation on smart textiles and modules in Al-human interaction.

2014-2021: Sir William Perkins School, Chertsey

- 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

April 2025 - Present: Co-Creation Panel Member, UoM

 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.

6th October 2024 - Present: Research Analyst, Al Edify

 Conducting pedagogical research, developing educational content, deploying AI tools, and establishing partnerships to embed ethical AI into institutional curricula.

October 2024 – May 2025: L'Oréal Brandstorm National Semi-Finalist, L'Oréal

• 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.

22nd July - 31st August 2024: Research Intern: The Impact of Physical Fabric Properties on Virtual Garment Creation, University of Manchester

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.

June 2024: Panel Speaker – "The Future of Teaching and Learning in Higher Education," University of Manchester T&L Conference

 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 Al in education, emphasising personalised learning, accessibility, and the student role in shaping adaptive Al tools.

1st June - 19th July 2024: Research Intern: Al in Fashion: A Scoping Review, University of Manchester

 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).

July 2022: Laser Research Intern, Tokamak Energy

 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.