

# DR. CRISTINA FIANI



## CONTACT

✉ cristina.fiani99@gmail.com

🌐 [linkedin.com/in/cristina-fiani/](https://www.linkedin.com/in/cristina-fiani/)

🌐 [www.cristinafiani.com](http://www.cristinafiani.com)

📍 Glasgow, UK

## EDUCATION

### PhD Psychology and Computing Science, Social AI CDT

University of Glasgow

2021-2025

### Graduate Biomedical Engineering (MEng)

University College London

2017-2021

Average Grade 83% - Solid Biomechanics 91%, Computing in Medicine 89%, Research Software Engineering with Python 91%, Biomedical Engineering Group project 76%

### Scientific French Baccalaureate

Notre-Dame de Boulogne, France

2014-2017

## VOLUNTEERING

### MCR Pathways

#### Mentor Volunteer,

Glasgow, UK January 2025- April 2025

- Spent one hour weekly mentoring a student, offering encouragement and guidance in their school.
- Introduced practical skills like effective note-taking to improve classroom success.
- Proposed and led a vision board activity to help the student set personal and academic goals.

### RespectMe, Scottish Anti-bullying Charity

Glasgow, UK

October 2022 - December 2024

- Ran co-design workshops with parents and children to raise awareness of the opportunities and risks of social virtual reality.
- Developed strong interpersonal and communication skills, as well as the ability to tailor my approach to different age groups and learning styles.

### Bookmark Reading Charity

London, UK January 2020 - August 2021

- Supported children with reading difficulties twice a week, using tailored strategies to improve their literacy skills and boost their confidence.

## PROFILE

Emerging Tech Analyst at Sony Interactive Entertainment. I completed my PhD, at the University of Glasgow, focusing on safeguarding children in social Virtual Reality (VR).

As a highly motivated, curious and disciplined individual, I am eager to find opportunities that will not only enhance my personal and professional growth, but also allow me to contribute my skills and passion to a dynamic team.

## WORK EXPERIENCE

### Emerging Tech Analyst, PlayStation (SIE)

February 2026 - Present

### Consultant/Tech Analyst, PlayStation (SIE)

April 2024 - January 2026

London and Online

- Consultant, Software Engineer (offering tailored solutions to meet team needs and drive innovation).

### PGTA, University of Glasgow

January 2024 - March 2024,

Glasgow

October 2024 - December 2024

- Facilitated lab sessions, supported the development of students' project work by offering feedback and guidance, graded assignments (COMPSCI5057 & PSYCH1001).

### VR Safety Intern, PlayStation (SIE)

September 2023 - December 2023

London and Online

- Conducted research and SWOT analysis to propose innovative PSVR/PSVR 2 safety solutions, enhancing user safety.
- Actively collaborated on multiple projects, attended cross-functional team meetings within the Consumer Experience department, and participated in the Safety Summit.

### Private Tutor, Superprof & Tutorful

September 2019 - Present

UK and Online

- Strengthened organizational and time management skills, preparing lessons in advance and ensuring each session runs smoothly.
- Adapted to individual learning styles and provided feedback and encouragement to help students reach their goals.

### Summer Research Intern (Amgen Scholar)

ETH Zurich, Switzerland (Online due to COVID)

July 2021 - September 2021

- Selected among 500 participants to the Amgen Program 2020/2021.
- Interned in the Laboratory for Movement Biomechanics ETH Zurich.
- Worked on a machine learning project: Pose Refinement in Automated Registration of 3D Implants to 2D X-Ray Images) using PyTorch3D optimization.

### Integrated Engineering Programme (IEP) ambassador

University College London

November 2018 - July 2021

- Worked to ensure that the award-winning undergraduate teaching programme stays innovative and dynamic for all students, by being involved in projects and events such as video production and student engineering conferences.
- Raised awareness of the IEP with delegates from Japan, sharing my experience as an engineering student.
- Took part in a Leadership training programme, enhancing my leadership skills such as planning and managing as well as supporting and encouraging team members.

### Creator and mentor of mentorship Be My Encourager

University College London, UK

September 2018 - July 2020

- Created and led the formation of a mentorship programme to help biomedical engineering students.
- Advised students on teamwork, presentations, coursework and life in London helping them gain confidence.

### Summer Laboratory Research Assistant

Francis Crick Institute, London, UK

July 2019 - August 2019

- Completed a machine learning project for biomedical image segmentation gaining programming, biology and science communication skills.
- Developed an artificial neural network that recognises Sensory Organ Precursors on the drosophila wing as they cause inconsistency in the image segmentations used to understand patterns in the veins' development.

## Impactive Project

UCL September 2018 - July 2019

- Engineer team leader: Designed and built a hearing device in a team. Developed leadership and decision-making skills.
- Volunteered in societies and engineering fairs at UCL, presenting the project to students and tutors.

## AWARDS

- Winner of Innovate UK Immersive Tech Awards 2025 in the category of UX & UI
- Gary Marsden Award **\$1850** for IDC 2023
- SICSA Research Scholar **£500** for CHI 2023
- SRITE+ Best Poster Award
- SPRITE+ Belfast 2023 Awarded Travel and Accommodation Funding
- CHI 24, IDC 23 Student Volunteer

## SKILLS

### Technical

- Programming: Java, Javascript, MATLAB, Python, R, C#, Arduino
- VR development (Unity, C#, Oculus Quest 2)
- Autodesk Fusion360, ADAMS, FEBio
- Mechanical testing experience (ElectroPuls 3000)
- Electronics
- Ultimaker 3D printer

### Research

- Participatory Design
- User studies
- Qualitative and Quantitative measures
- Data and statistical analyses
- Academic Writing
- Science Communication

### Other

- Teamwork & Collaboration
- Communication
- Leadership
- Teaching

## LANGUAGES

English



French



Spanish



## PERSONAL INTERESTS

- **Boxing, Weightlifting, Hyrox**
- **Dancing:** Heels, Modern Jazz, Dancehall, Hip Hop, Salsa. Participated in 2018 charity show (Triple Bill Showcase).
- **Travelling:** lived 6 years in Nigeria, full immersion summer programs in Boston (2016), Malaga (2015), Barcelona (2014).

## PROJECTS

Numerous projects consolidating Human-Computer Interaction and engineering skills including innovative thinking, problem-solving and communication skills:

### PhD Project: *Safeguarding Children in Social Virtual Reality (VR)*

My PhD focused on how to safeguard children (aged 8-16) from harassment in Social Virtual Reality (VR). It explores stakeholder perceptions, moderation design spaces, and the development and evaluation of Automated Embodied Moderators (AEMs).

The work is structured around eight studies, with findings published at top-tier HCI venues (CSCW, CHI, IDC), involving **200+** children, **50+** parents, **3** grandparents and **16** experts.

- Study #1: Mixed-methods questionnaire with **149 participants (70 parents, 70 social-VR adult users)**, examining perceptions of parents and non-parent adults familiar with Social VR.
  - Publication:
    - CSCW 2024 (Full Paper): <https://doi.org/10.1145/3652867>
- Study #2: One-on-one interviews with **16 child online safety/psychology experts**, to identify design gaps and recommendations for real-time safety tools.
  - Under Review (IJCCI); Preprint available
- Study #3: User study with **40 children** testing three blocking strategies and two intervention perspectives in simulated harassment scenarios.
  - Publication:
    - IDC 2025 (Full Paper) <https://dl.acm.org/doi/10.1145/3713043.3728850>
- Study #4: Wizard-of-Oz prototype "Big Buddy" tested with **43 children and 17 parents** to understand reactions to a simulated AEM during group harassment.
  - Publications:
    - IDC 2023 (Full Paper): <https://doi.org/10.1145/3585088.3589374>
    - CHI 2023 (LBW): <https://doi.org/10.1145/3544549.3585840>
- Studies #5 & #6: Workshops and interviews with **16 experts, 13 children, and 8 guardians (5 parents, 3 grandparents)**, exploring stakeholder expectations and concerns around AEMs.
  - Publication:
    - CHI 2024 (Full Paper) <https://doi.org/10.1145/3613904.3642144>
- Study #7: User study with **34 children** testing varying levels of automation in intervention (manual, semi-, and fully-automated) during group harassment.
  - Publication:
    - IDC 2025 (Full Paper) <https://dl.acm.org/doi/10.1145/3713043.3728850>
- Study #8: Study with **34 parent-child** pairs testing parental involvement levels using an app during simulated VR harassment.

### Master's individual research project: *Improving Aortic Stenosis Stent Sizing with Integrated Impedance Measurements*

- Gained skills in MATLAB and Python, computing simulations and 3D image reconstructions using Electrical Impedance Tomography and Diffuse Optical Tomography Reconstruction Software (EIDORS).
- Successfully presented findings at the 21st International Conference on Biomedical Applications of Electrical Impedance Tomography (EIT 2021) - June 2021.
- Link to papers: <https://doi.org/10.1109/IROS47612.2022.9981150>, [https://zenodo.org/record/4635480/files/EIT2021\\_BookOfAbstracts\\_rev01.pdf](https://zenodo.org/record/4635480/files/EIT2021_BookOfAbstracts_rev01.pdf)

### Third-year design group project: *Designing and building a personalised cushion for wheelchair basketball players*

- Experienced the whole design cycle: created a product starting from an idea to the prototype, obtaining user feedback, testing it and designing a business plan.
- Collaborated with the company Infi-Text; using their pressure maps to test the prototype.
- Developed leadership, problem-solving, planning and creative thinking skills.

### Scenario weeks: *Week-long team projects focusing on a technical engineering design project as part of the Design and Professional skills module*

- Designed and built a Positive Expiratory Pulmonary (PEP) device for a child with a lung disease; considering not only the functional outcomes but also personalisation to make it fun for the child aiming for longer-term use.
- Developed a mouse device to help a person without a hand and very limited movement but intact muscles to use a computer.
- Created a smartphone healthcare application with MATLAB to measure the pulse rate of the phone user.