# **Robin Bretin**

## Looking For a Postdoc!

PhD, Cognitive Engineer



Paris, FRANCE



r.bretin.1@research.gla.ac.uk



robinbretin.github.io





search 'Robin Bretin'

With a background in both computer science and applied cognitive psychology, I am a versatile 'Swiss army knife' researcher, equally at ease with technical and theoretical work in Human-Robot and Human-Computer Interaction. My expertise lies in Extended Reality, proxemic behaviors, and Human-Drone Interaction—the core pillars of my thesis project. A lifelong learner driven by the question 'but why?', I am passionate about tackling unresolved problems through innovative approaches—because the answers are out there, waiting to be uncovered.



### **Research Activities**

• University of Glasgow, United Kingdom **III** January 2020 - January 2024

Performed various research activities throughout my thesis as a PhD Student at the University of Glasgow.

- Designed and conducted in-person and VR-based user studies, employing Unity, C#, and Python drone programming.
- Quantitative and qualitative analysis of various data format using R.
- Academic writing (e.g., posters, journal and conference papers) leading to publications in top-tier peer-reviewed journals and conferences.
- Presented published work at international conferences, including CHI and INTERACT.
- Reviewed papers for CHI, HRI, CSCW, THRI, and ISMAR.
- Served as 1AC for CHI LBW track.
- Supervised student projects and internships.

### Research Visit

• Chalmers University of Technology, Sweden May 2023 - June 2023

Led a project on drones' social cues impact on proxemics, in collaboration with local researchers including Dr. Mohammad Obaid.

- Collaboration with multiple stakeholders.
- Adaptability to novel working environments.

### **Human Factor Consultant Intern**

 SNCF/Human Design Group, France **May 2019 - June 2019** 

Developed a methodology to assess human reliability in train conductor functions for the Autonomous Train project.

Collaborated with clients to gather their needs, presenting findings and incorporating feedback to align the project outcomes with operational requirements.

## Education



PhD in Computing Science and Psychology





University of Glasgow



Social AI CDT

"Beyond Boundaries: Unveiling Human-Drone Proxemic Dynamics Using Virtual Reality"

Supervised by **Dr Mohamed** Khamis and Prof. Emily Cross

Conducting in-person user studies using virtual reality to understand Human-Drone Proxemics and inform Social Drone design.

2020 2017

Cognitive Engineer (Master 2 Level)

Bordeaux, France



Cognitics aims to understand and improve the flow of human-machine symbiosis, in terms of performance, substitution, safety, ease and comfort, and augment human through technologies.

Training: Cognitive Sciences, UX Design, Programming, Project Management

### Awards

**▼ IFIP TC13 Pioneers' Award for Best Doctoral Student Paper**INTERACT 2023

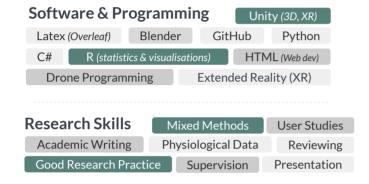
Recognized for exceptional contribution to doctoral research in Human-Computer Interaction.

**▼** Best Paper Reviewers' Choice Award
INTERACT 2023

Awarded for the best conference paper.

## ₹ Skills

2023



## Languages



## Interests

### **Professional**

Understanding Human Behaviour XR

Social Robotics Good Research Practice

Human-Drone Interaction Mixed Methods

### **Hobbies**

Self taught musician (*Guitar*, *Piano*, *Flûte*), CinePhile, Gamer, Nature, Sport enthusiast, Avid reader (dystopia, fantasy), Chess enthusiast...

## Publications

More publications forthcoming (under review and in progress).

### 2024

Evaluating Transferable Emotion Expressions for Zoomorphic Social Robots using VR Prototyping

Shaun Macdonald, Robin Bretin, and Salma ElSayed IEEE International Symposium on Mixed and Augmented Reality (ISMAR), Oct 2024 https://doi.org/10.1109/ISMAR62088.2024.00125

Expert, Guardian and Child Perspectives on Automated Embodied Moderators for Safeguarding Children in Social Virtual Reality

Cristina Fiani, Robin Bretin , Shaun Alexander Macdonald, and Mohamed Khamis, Mark Mcgill

Proceedings of the 2024 CHI Conference, *May 2024* https://doi.org/10.1145/3613904.3642144

**Co-existing with Drones:** A Virtual Exploration of Proxemic Behaviours and Users' Insights on Social Drones

Robin Bretin, Emily Cross, and Mohamed Khamis International Journal of Social Robotics (IJSR), *March* 2024 https://doi.org/10.1007/s12369-024-01111-7

#### 2023

"Do I Run Away?": Proximity, Stress and Discomfort in Human-Drone Interaction in Real and Virtual Environments

Robin Bretin, Emily Cross, and Mohamed Khamis Human-Computer Interaction – INTERACT, Oct 2023 https://doi.org/10.1007/978-3-031-42283-6\_29

**Big Buddy:** Exploring Child Reactions and Parental Perceptions towards a Simulated Embodied Moderating System for Social Virtual Reality

Cristina Fiani, Robin Bretin, and Mohamed Khamis, Mark Mcgill Proceedings of the 22nd Annual ACM Interaction Design and Children Conference, *June* 2023 https://doi.org/10.1145/3585088.3589374

**Big Buddy:** A Simulated Embodied Moderating System to Mitigate Children's Reaction to Provocative Situations within Social Virtual Reality

Cristina Fiani, Robin Bretin, and Mohamed Khamis, Mark Mcgill Extended Abstracts of the 2023 CHI Conference, *April* 2023 https://doi.org/10.1145/3544549.3585840

### 2022

**Co-existing With a Drone:** Using Virtual Reality to Investigate the Effect of the Drone's Height and Cover Story on Proxemic Behaviours

Robin Bretin, Emily Cross, and Mohamed Khamis Extended Abstracts of the 2022 CHI Conference, *April* 2022 https://doi.org/10.1145/3491101.3519750

**The Feet in Human-Centred Security:** Investigating Foot-Based User Authentication for Public Displays

Kieran Watson, Robin Bretin, Mohamed Khamis, and Florian Mathis Extended Abstracts of the 2022 CHI Conference, *April* 2022 https://doi.org/10.1145/3491101.3519838