RESEARCHER · GAME DESIGNER

Sydney, Australia

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Research Interests

My research explores how interactive systems shape player decision-making, risk-taking behaviour, and moral reasoning. I am interested in developing and investigating design frameworks that examine player agency through emergent experiences in gameplay systems.

Education

Macquarie University

Sydney, Australia

DOCTOR OF PHILOSOPHY IN COMPUTER SCIENCE

Dec. 2020-Feb. 2025

- THESIS: Oscillatory Design for Systems-based Ethical Gameplay
- SUPERVISORS: Dr. Malcolm Ryan and Dr. Mitchell McEwan

Abertay University

Dundee, Scotland

MASTERS BY RESEARCH IN GAMES AND COMPUTING

Sept. 2018-Sept. 2019

• THESIS: Design Framework Representing Paradoxical Gameplay Systems

Abertay University Dundee, Scotland

BACHELOR OF ARTS IN GAME DESIGN & PRODUCTION (FIRST CLASS HONOURS)

Sept. 2016-Aug. 2018

• THESIS: Paradoxical and Self-Contradicting Gameplay

Publications

IN PREPARATION [2]

Moral Gameplay in Scripted and Systems-based Games

Vedant Sansare, Malcolm Ryan

Games and Culture

Understanding Player Motivations and Boundaries in Moral Game Scenarios

Vedant Sansare, Dan Staines

Games and Culture

JOURNAL ARTICLES [1]

An Oscillatory Model for Developing Narratives for Serious Games

2023

Vedant Sansare, Malcolm Ryan, Mitchell McEwan

ETC Press, pp. 132-148

DOI: 10.57862/TQ28-4693

CONFERENCE PROCEEDINGS [4]

Industry Perspective on Systems-Driven Moral Game Design

Vedant Sansare

DiGRA Australia 2025 National Conference

Adelaide, Australia

2025

Ethical Decision-making Through Systems-based Gameplay

Vedant Sansare, Malcolm Ryan, Mitchell McEwan

DiGRA Australia 2023 National Conference Sydney, Australia

2023

Design of a serious game for cybersecurity ethics training

Malcolm Ryan, Mitchell McEwan, Vedant Sansare, Paul Formosa, Deborah Richards, Michael Hitchens

Proceedings of DiGRA 2022 Conference: Bringing Worlds Together Kraków, Poland

2022

The Impact of Social Proof on Moral Decision-Making in Video Games

Vedant Sansare, Jake Rovere, Mitchell McEwan, Malcolm Ryan

Extended Abstracts of the 2021 Annual Symposium on Computer-Human Interaction in Play

DOI: 10.1145/3450337.3483473

2021

Presentations & Talks

2024	Poster Presentation, Macquarie School of Computing Industry Networking Event	Sydney, Australia
2023	Conference Talk, Games For Change Asia-Pacific	Melbourne, Australia
2023	Poster Presentation, Macquarie School of Computing Industry Networking Event	Sydney, Australia
2019	Research Exhibitor, InGAME: Innovation for Games and Media Enterprise	Dundee, Scotland
2019	Conference Talk, Irish Conference For Game-based Learning	County Cork, Ireland

Research Experience

Macquarie University

Sydney, Australia

HONORARY POSTDOCTORAL RESEARCHER

April 2025-Present

- · Running eye-tracking studies (n=40) examining players' gaze patterns, fixations and saccadic movements during moral decision-making in game scenarios, with implications for understanding risk-taking and choice behavior under uncertainty.
- Supervising research interns on experimental design, data collection protocols, and quantitative analysis methodologies.
- Conducted statistical analysis and interpretation on biometric and player choice data.
- · Contributing to research projects investigating ethical game design, player agency, and behavioural engagement in interactive systems.

Macquarie University

Sydney, Australia

RESEARCH ASSISTANT

July 2023-Dec 2023

- Designed and conducted controlled user studies evaluating social interaction mechanics in VR environments across Meta Quest 2/3 and HTC Vive platforms.
- · Implemented VR interaction systems and gameplay design elements to test social engagement hypotheses.

Research Methods & Expertise

Experimental Design Data Collection Statistical Analysis **Game Research Methods Qualitative Methods**

User studies, controlled experiments, between-subjects and within-subjects designs, behavioural experiments Biometric data, player behaviour tracking, VR/AR interaction logging, survey design, semi-structured interviews Quantitative analysis (R, Python), hypothesis testing, regression analysis, ANOVA, mixed-methods analysis Player experience evaluation, game analytics, playtest methodologies, systems analysis, narrative analysis

Thematic analysis, content analysis, observational research, ethnographic approaches

Game-Based Research

- **Experimental Games,** Comparing scripted vs. systems-driven moral decision-making mechanics (PhD) 2024
- 2023 **Social Interaction VR Game**, Designed for social interaction in VR (Research Assistant)
- 2021 The Great Fire, Modded existing game to examine social proof effects on moral decision-making
- 2019 Paradoxical Game Design Prototype, Experimental game exploring paradoxical design principles (Masters Research)

Teaching Experience

Torrens University

Sydney, Australia

CASUAL LECTURER

Sept. 2023-Present

- Deliver modules across game design theory & practice, programming (C++/C# with Unreal Engine / Unity), and games production.
- Developed Games Programming curriculum including lectures, practice-based course materials, and assessments.

Macquarie University

Sydney, Australia

TEACHING ASSISTANT

Sept. 2021-April 2025

- · Assisted with Advanced Game Design units, including VR and AR development, providing technical support and feedback to students.
- · Supported Games Programming courses by conducting tutorials, lab sessions, and providing one-on-one mentoring to students.
- Facilitated Industry Games Project Management courses, helping student teams with project planning and development workflows.
- Supervised undergraduate honours projects, providing guidance on research methods and related practical outputs.

Academic Service

2025	Peer Reviewer, Hawaii International Conference on System Sciences	
2024	Peer Reviewer, ACM CHI Conference on Human Factors in Computing Systems	
2023	Session Chair, DiGRA Australia 2025 National Conference	Sydney, Australia
2023	Conference Organiser, DiGRA Australia 2023 National Conference	Sydney, Australia
2023	Peer Reviewer, DiGRA Australia National Conference	

Funding & Grants_____

2024	Postgraduate Research Fund, Macquarie University	Sydney, Australia
2020	International Macquarie University Research Excellence Scholarship, Fully-funded PhD	Sydney, Australia
	scholarship, Macquarie University	Sydney, Adstralia
2019	Chancellor's Award, Masters scholarship including conference travel, Abertay University	Dundee, Scotland
2016	Saltire Scholarship, Undergraduate scholarship, Scottish Government	Scotland

Professional Memberships _____

2020 **Member,** Association for Computing Machinery (ACM) 2020 Member, Digital Games Research Association (DiGRA)

Technical Skills_

Programming C++, Python, C#, Emacs Lisp, R, Bash **Game Engines** Unreal Engine 5, Unity, Godot, Game Maker **Tools/Libraries** ੴFX, Emacs, OpenCV, MATLAB

OS Platform WINDOWS, LINUX