MohammadHossein Askari Hezaveh

39 Gol St., Niro Daryaei St., Tehran, Iran
hosseinaskari.h@gmail.com │ +98 939 332 9129
GitHub │ Portfolio

Education

MA in Computational Arts   Goldsmiths, University of London
Distinction   2023–2024
Thesis: *"Exploring Socio‑Cultural Behaviours and Language Evolution in AI"*
Supervisor: Dr. Mattia Paganelli

BSc in Architectural Engineering   Tehran Azad University
Final Grade: 15.57/20   2016–2021

Research Experience

Master's Thesis Research   2023–2024
Goldsmiths, University of London

- Designed and implemented multi‑agent reinforcement learning system studying emergent communication between AI agents
- Developed AI‑based evaluators analyzing emergent communication protocols and agent dialogue patterns
- Applied geometric and information‑theoretic analysis to spontaneous narrative structuring under minimal constraints
- Published findings: *"Emergence of High‑Dimensional Communication Protocols in Multi‑Agent Systems"* (preprint)

Research Collaborator, Yaya Labs   London, 2024

- Designed multi‑agent communication system using AI avatars trained on complex linguistic data (hate speech datasets)
- Investigated effects of platform moderation pressures on agent communication strategies
- Analyzed emergent narrative patterns in live, dynamic environments
- Discovered and addressed cultural bias in hate speech training corpora

Professional Experience

AI and Data Science Technician   2020–2022
Asan Darman Homecare, Tehran

- Designed AI‑driven predictive models for patient risk assessment enabling dynamic resource allocation
- Developed machine learning pipeline integrating patient and staff data forecasting healthcare demands
- Applied NLP techniques to caregiver feedback analysis, refining risk evaluation processes

Publications & Presentations

Preprints

Askari, H. (2025). *SM‑MCPM: State‑Modulated Monte Carlo Physarum Machine.*
DOI: 10.13140/RG.2.2.13933.24803

Askari, H. (2024). *Emergence of High‑Dimensional Communication Protocols in Multi‑Agent Systems.*
DOI: 10.13140/RG.2.2.27043.72489

Exhibition & Workshop

"There's a Party in My Room and I'm Not Invited." IEEE ICME 2025 (accepted). Installation and workshop presentation exploring AI dialogue exclusion and emergent communication.

Artistic Practice & Exhibitions

Selected Works:

- *"Interlingua"* (2024) – Multi‑agent reinforcement learning installation exploring emergent AI language beyond human comprehension
- *"There is a Party in My Room"* (2024) – AI dialogue installation examining exclusion from machine communication
- *"Sorry Machines"* (2024) – Investigation of platform moderation bias using hate speech datasets
- *"Meat Grinder"* (2023) – Exploration of algorithmic bias in sexual content representation
- *"Biosonic Resonance"* (2023) – Real‑time biometric data integration with point cloud physics
- *"Embodying Nothingness"* (2023) – LIDAR‑scanned childhood home translated into VR environment

Technical Skills

Programming Languages: Python (TensorFlow, PyTorch, scikit‑learn), C++ (OpenFrameworks), C# (Unity), JavaScript (p5.js, Processing)

Machine Learning & AI: Multi‑agent reinforcement learning (MARL), natural language processing, computer vision, deep learning, generative AI

Development Tools: Unity (VR/game development, compute shaders), Blender (3D modeling), Git (version control)

Data Science: Pandas, NumPy, Matplotlib, SQL, web scraping, large‑scale corpus building, social media data mining

Hardware Integration: Biometric sensors (EmotiBit), VR development (Quest, Valve Index), IoT systems, LIDAR scanning

Research Methods: Multi‑agent system design, high‑dimensional data analysis, information theory, geometric analysis of communication protocols, practice‑led artistic research

Professional Memberships

Multi‑Agent Systems Group, The Alan Turing Institute
Association d'Intelligence Artificielle France‑Chine (AIFC)

References

Dr. Mattia Paganelli
Lecturer in Computational Arts
Goldsmiths, University of London
Email: m.paganelli@gold.ac.uk
Goldsmiths profile
Primary MA supervisor. Expertise: computational complexity, emergence, non‑linear systems, contemporary philosophy and art.

Jérémie Wenger
Lecturer in Computational Arts
Goldsmiths, University of London
Email: j.wenger@gold.ac.uk
Website: jeremiewenger.com
MA thesis advisor. Expertise: literature and AI, poetic approaches to computational arts, creative AI applications.

Ben Ditto
Creative Director, Yaya Labs
Email: info@ditto‑nation.com
Website: www.yayalabs.io
Research collaborator. Expertise: AI bias investigation, algorithmic racism, cultural stereotypes in machine learning, creative technology.