

Samir Rajesh

samirrjsh@gmail.com | London, UK | [Portfolio](#) | [GitHub](#)

PERSONAL STATEMENT

I'm a Creative Technologist specialising in building immersive, interactive systems that bridge real-time graphics, machine learning, and custom hardware, with recent work exploring quantum-inspired decision mechanics in simulations. Through tools like Unreal Engine, Unity, TouchDesigner, and physical computing, I create everything from ML-driven social simulations to kinetic installations and experimental audio devices. My background spans emergent narrative design in virtual environments, full-stack ML model development, and tangible interactivity.

FEATURED PROJECTS *(further details on my Portfolio)*

Qollapse: Quantum-Inspired Social Simulation [MSc Thesis]

- Designed a quantum-inspired agent-based simulation of relational identity in Unity.
- Implemented superposition-based role selection with probabilistic collapse via interaction.
- Built analysis pipelines to study emergent social dynamics over long-run simulations.

Granola

- Engineered a Microcontroller-based real-time granular synthesizer with live sampling, multi-parameter grain control, and low-latency audio processing in C++.

Fugue State

- Developed a custom DCGAN pipeline for mel-spectrogram synthesis and implemented progressive neural channel ablation to generate evolving audio textures.

A comparative analysis of generative paradigms for image synthesis [Bachelor's Thesis]

- Developed and trained Deep Convolutional GANs and Diffusion Models for fashion image generation
- Comparatively analyzed results of models using the Fréchet Inception Distance metric.

EDUCATION

University of the Arts London, Creative Computing Institute

MSc Creative Computing

December, 2025

London, UK

- Immersive exploration of physical computing, responsive environments, machine intelligence, and critical coding, empowering creative and experiential tech development.

University of Warwick

BSc (Hons) Computer Science

June, 2024

Warwick, UK

- Functional Programming, Data Structures, Computer Architecture, Algorithms, OS/Networks, Formal Languages & Logic, Machine Learning, Computer Graphics, Mobile Robotics

WORK EXPERIENCE

Orahi

Machine Learning Intern

Jul. – Aug. 2021

Remote

- Developed a Python-based LSTM time-series model to predict the timestamp of the next motion sensor event, enabling proactive monitoring of elderly residents in collaboration with client Moxiam.
- Researched and evaluated multiple predictive modelling approaches, ultimately selecting the LSTM strategy for its balance of accuracy and efficiency.

Fidelity International

Software Engineering Intern

Jul. – Aug. 2019

Kronberg, Germany

- Automated the regression testing pipeline for the company's global website using CodeceptJS and JavaScript, enhancing test repeatability and efficiency.

SKILLS & INTERESTS

- **Creative Fabrication / Tools:** Unreal Engine, Unity, TouchDesigner, Arduino/Electronics, 3D CAD
- **Programming & ML:** C/C++, C#, Python(Torch), Java, Haskell, Qiskit, Web Dev (HTML/CSS/JS)