MICHELE MORISCO

GAMEPLAY/AI/AR PROGRAMMER

Final year student in Artificial Intelligence and Machine Learning is collaborating with the Visual Computing Lab of CNR-Pisa and the School of Advanced Studies Sant'Anna for the thesis work. In free time, develop an indie game as a lead programmer. Good communication skills, problem-solving, and teamwork acquired over the years with academic and personal projects and with events like Game Jams.

CONTACTS

michelemorisco.dev@gmail.com

michele-morisco.netlify.app

michele-morisco-6b354919a

La Spezia, Italy

SOFT SKILLS

- Communication
- Teamwork
- Time management
- Eager to learn
- Problem-solving
- Planning
- Curiosity
- Listening

HARD SKILLS

- C, C++, C#, Python, Java
- Web development: HTML, CSS, JavaScript
- Pytorch, Tensorflow, Scikit-learn
- Kaggle, Google Colab, Jupyter
- Unity
- Google ARCore, Vuforia
- Project management: Agile methods
- Photoshop

EDUCATION

M.SC. IN ARTIFICIAL INTELLIGENCE

University of Pisa | 2020 - Ongoing

B.SC. IN COMPUTER SCIENCE

University of Pisa | 2014 - 2020

CERTIFICATES

TRAINING COURSE IN GAME DESIGN

University of Pisa | 2021

LANGUAGES

ITALIAN - NATIVE

ENGLISH - B2

EVENTS

GMTK GAME JAM 2023

IF GAME JAM 2019

GLOBAL GAME JAM 2019

PROJECTS

Thesis - Recovering Physical Prop

I'm working on thesis work with the Visual Computing Lab of CNR-Pisa and the School of Advanced Studies Sant'Anna.
My work is about designing an intelligent system that recovers the physical properties of a prop using **Computer Vision** techniques and a glove that measures the grip pressure on the prop. Currently, I'm preparing the environment for the experiments.
- I modeled a 3D box as a tester using **OpenSCAD**.
- I have created a tool in **C++** using **QT Creator** and **OpenCV** library to create a function that measures the prop's position according to the four camera's positions.

Playing retro games with Dueling DQN

"Intelligent Systems for Pattern Recognition" course's project.
- I have implemented different DQN versions such as Dueling DQN for learning to an agent how to play some Atari and NES games.
- I have learned to use **OpenAI Gym** and the **Reinforcement Learning** principles.

Cubic stylization: Improving mesh quality

"3D Geometry Modeling and Processing" course's project.
- I have implemented a new plugin for **MeshLab**, cooperating with the Visual Computing Lab of CNR-Pisa.
- I have created a **C++** plugin that converts from a 3D model to a cubic-style one, keeping the original shapes and improving the mesh quality.

PokéBusters

Human-Machine Interaction" course's project.
An **augmented reality** web minigame where the player must take pictures of ghosts before the timer expires.
- I have developed entirely the minigame in **HTML** and **JavaScript** using the **Three.js** library to import the 3D models.

Hisuian Tales

A **platform 2D** game made with **Unity**. The main game mechanic is drawing symbols with the mouse. Each symbol has an effect that gives to player a temporary power to overcome the obstacles. My responsibilities:
- I have worked entirely on the **technical side** of the game, from the player's movement to the enemys' AI.
- I have worked on the **level** and **game design**, defining the puzzles and challenges.
- Initially, I implemented the **$Q Recognizer** algorithms to recognize the symbols, and then I updated the system by applying a **CNN**.
- I have created a dataset with the symbols.

Judith

A **puzzle 2D** and **procedural narrative** game with **platforming** elements made with **Unity** and it is currently in progress. The main game mechanic is the possession of different NPCs and objects to resolve puzzles and complete the quests following the NPCs' routine. Each player's actions can change the character's routine. My responsibilities:
- I have worked entirely on the **technical side** of the game, from the player's movement to the enemys' AI, such as the **NPCs' navigation system**.
- I have worked on the **level** and **game design**, defining a **Game Design Document**.
- I have used an **open-source tool** to create the dialogue system and the NPCs routine system, adapting to the project.