



Seminar

# Artificial Intelligence in Video Games: the illusion of intelligence in the context of interactive entertainment

27 April 2022, 15:00 – *online*

Register here: <http://bit.ly/2022-AI-GAMES>

**Abstract** - Video games and their role in the entertainment industry have grown exponentially during the last decades, also thanks to their growing capability to engage users. Nowadays, video games are expected to offer challenges to players in highly dynamic, real-world-like environments. For example, characters need to be able to navigate complex geometries, fly, move to cover, act in groups, observe players behavior and react accordingly. The goal is to bring life to a simulated world, respecting the technical limitations of the platform, and the design and implementations of such features are a great application ground for Artificial Intelligence in the general sense.

In this seminar we explore Artificial Intelligence techniques and concepts with a focus on the video games context. After a brief introduction to Game AI and its goal, we discuss some of the main differences between "Academic" and "Game" AI. We then deep dive into the key topics that make non-playing characters alive, such as Decision Making, Pathfinding, Movement and World Analysis. The seminar ends with a brief discussion about the importance of Game AI is both for video games and researchers, and how these fields are relevant to each other.

**Andrea Tucci** is currently a senior gameplay programmer at *Rocksteady*, one of the major video game developer worldwide. Prior to *Rocksteady*, he worked at *Ubisoft*, contributing to mainstream titles such as *Ghost Recon Wildlands* and *Mario Rabbids Kingdom Battle*; he has been working on the game *Suicide Squad: Kill the Justice League*. His well-established know-how on AI and video games range over all aspects of the field, with a special focus on enemy and boss behaviors, both from a gameplay and an AI point of view.

He started his studies as a bachelor Computer Scientist at the *Department of Mathematics and Computer Science of University of Calabria*, Italy, and then got a master degree in Games Gevelopment at the University of Abertay Dundee, UK; in the past, he contributed to several research projects with University of Calabria, mainly focused on bringing academic AI studies into video games. Andrea is a member of the British Academy of Film and Television Arts (*BAFTA*), and part of the *BAFTA Game crew*.

