## <u>Propagation of Pro-Social and Anti-Social Norms in Virtual Video-Game</u> Environments

## Research Summary:

In this study, we will examine whether pro-social and anti-social behaviors in the virtual environment in general and in multiplayer computer games in particular, are proliferated and propagated by similar behaviors by team members in the game. If so, we would like to see in what patterns these behaviors are spreading. Do pro-social behaviors spread at a similar rate and are symmetric to the spreading patterns of anti-social behaviors?

Issues concerning the nature of people, such as whether people are inherently "good" or "bad", are common in the field of social psychology. Oftentimes, pro-social behaviors are behaviors that contribute to the group or society to which the individual belongs, but do not contribute to the individual directly. In contrast, antisocial behaviors may benefit the individual at the expense of the group and its goals.

So far, research in social psychology has attempted to examine these issues through classical statistics, experimental studies and with limited sample groups. Over the past decade, we have witnessed technological developments in the field of online computer gaming, which enabled the accumulation of vast databases, as well as developments in the world of data science that enable the analysis of this vast data. This technology helps us test the aforementioned questions on a wide sample of subjects, variables and data, using advanced tools from the field of data science and epidemiological statistics. Such research can be conducted in a "natural" and correlative manner, in an uninhibited virtual world, rather than in an experimental configuration (i.e. in a laboratory). The research we propose may develop the way we examine the presented issues and lead to more accurate theoretical and statistical conclusions.

By incorporating statistical tools from the world of data science and game theory under the guidance of Dr. Yakir Brchenko, as well as tools, ideas and theories from the field of social psychology under the guidance of Dr. Michael Gilad, we can conduct innovative and unique research in the field.