**University of Milan**

**Master’s program in Data Science & Economics**

**Advanced Multivariate Statistics**

**Project submission: Detailed info**

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Provisional Project Title: ***A statistical approach to reverse engineering of a context-aware game.***

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Abstract (max 200 words):

In a game design context, generating objects (like enemies, items etc.) in an automatic but sensible way is a key factor. In this project we will model multiple analyses to exploit the generative process (the so-called *spawn algorithm*) behind a geolocation-aware game platform (Pokémon Go).

Since the spawn algorithm is kept secret but input like neighbourhood statistics, timeslot, weather parameters and fixed-object coordinates, and output (generated-object coordinates) are observable, we will provide a valid approximation of the generating mixture working on a sample dataset made up to 300.000 observation described by more than 200 features.