

Title: HexMage - Encounter Balancing in Hex Arena

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Abstract: Procedural content generation (PCG) is mostly examined in the context of map/environment creation, rather than generating the actual game characters. The goal of this thesis is to design a turn-based RPG-like game with perfect information for which we can generate balanced encounters. The game consists of a hex-based arena in which two teams fight. Each team consists of a few player controller characters with unique abilities. We generate the attributes of these abilities in order to make the encounter balanced. We will also build an AI that can be used to automatically play-test the PCG algorithm. The goal is to generate an equally strong, but different opponent.

Keywords: video games encounter balancing hex arena rpg elements