How the Ocean Personality Model Affects the Perception of Crowds

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Most crowd simulators animate homogeneous crowds but include underlying parameters that users can tune to create variations in the crowd. However, these parameters are specific to the crowd models and might be difficult for animators or naïve users to use. A proposed approach maps these parameters to personality traits. It extends the HiDAC (High-Density Autonomous Crowds) system by providing each agent with a personality model based on the Ocean (openness, conscientiousness, extroversion, agreeableness, and neuroticism) personality model. Each trait has an associated nominal behavior. Specifying an agent’s personality leads to automation of low-level parameter tuning. User studies validated the mapping by assessing users’ perception of the traits in animations that illustrate such behaviors.

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