Gamewell: A Tangible Tabletop Gaming Platform

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The gamewell project brings digital content and computational game engines to the table to enable new forms of multi-player tabletop game play. Traditional tabletop games are a popular pastime: they serve to entertain and to challenge, and they provide an informal setting for improvisational storytelling, role-playing and face-to-face social interaction among players. On digital tabletops, an embedded display and multi-user interaction via touch or tagged tangible objects integrates the physicality of traditional tabletop gameplay with the increased complexity afforded by computationally-driven games.

Developed in XNA, Gamewell is a platform and manager for tangible and multi-touch tabletop games that allows us to explore novel interaction methods and game genres for digital tabletops. Through creation and player testing of different games, we explore interaction methods that can be used across different tabletop games interaction methods that are specific to certain games or game types.

The first game developed for Gamewell is ColorCross, where players engage in a Twister-like cooperative play making use of both the physical and digital aspects of the table. Other games in development include Space Vectors, an arcade-style multi-player tabletop strategy game, a chess-inspired strategy game with computationally-controlled terrain maps, and a multi-player fluid dynamics simulation game.