



## USING CLUE AS A SOFTWARE PLATFORM TO TEACH ARTIFICIAL INTELLIGENCE: CONTINUING INVESTIGATION AND DEVELOPMENT

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### ABSTRACT

*ClueMe is a programming platform which aims to provide a new way for high school students to learn basic concepts of artificial intelligence. Its goal is to be able to provide an easy-to-use drag-and-drop interface where the user can customize programmable agents. The platform is similar to programming utilities such as Scratch and ToonTalk set in the murder-mystery deduction board game Clue (Cluedo in some markets). Users treat the characters in the game as software agents whose actions and decisions are programmed. The user may then pit his programmed agent (hereby referred to as “player”) against other players or against a stock player provided.*

*ClueMe was divided into two components: the main game (Clue/Cluedo) and the programming interface.*

*The developers utilized source code written for a Clue game and modified it to allow the option of choosing players that are user-designed. The ClueMe programming interface, patterned after Scratch, utilizes tiles that restrict the allowed actions for the user based on syntactical synergy.*

*The project hopes to look at the efficacy of using soft programmable agents to aid in the education of Computer Science concepts at the secondary level and early tertiary level of education. The researchers hypothesize that gamifying the learning of programming agents by making players compete against other designs will motivate students to study the underlying principles of the tasks that their agents must perform to outplay others.*