

**MEASUREMENT OF HUMAN LOGICAL REASONING PROGRESS  
BASED ON COMPUTER GAME PLAYING**

Undergraduate Thesis  
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In partial fulfilment  
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## ABSTRACT

**ROLLAN, CAMILLE ABIGAIL M. AND VELASCO, MIHJ T.,**  
**Measurement of Human Logical Reasoning Progress based on Computer Game**  
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The study entitled "Measurement of Human Logical Reasoning Progress based on Computer Game Playing" was conducted to measure human logical thinking that could help high school students to develop their intellectual ability and their logical awareness.

The study incorporated the Fuzzy Logic which was used to decide for the next combination of numbers that the Artificial Intelligence would use. The software provided an Artificial Intelligence that could be a code breaker which would alternately guess the code with the user also an artificial player that would challenge the user in the game even without a human opponent.

The proponents used Prototyping Model Methodology in developing the software. This includes four (4) phases; Prototype Requirements, Prototype Design, Prototype System, and the Test phase. The Microsoft Visual C# was used as the programming language.

The software was evaluated by randomly selected high school students from different schools and college students of Cavite State University- Main Campus based on the following criteria: Functionality, Reliability, Usability, Efficiency, Maintainability and Portability. The system passed the criteria and met all the objectives and requirements.