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Faculty of Engineering & Technology
School of Computer Science and Engineering
T.Y.B.Tech.CSF

T.Y. Semester-VI (23-24) Seminar Synopsis

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| Name of Student | SAUBHAGYA SINGH |
| PRN No. | 1032211144 |
| Roll No. | 24 |
| Panel No. | A |
| Date | 21-02-24 |
| Topic | Synopsis: Chess AI - Mimic Player for Enhanced Gameplay |
| Abstract (one paragraph of 200-300 words) | <p>This research explores the development of a Chess AI system that emulates and mimics human player behaviors to enhance gameplay. Chess, renowned for its strategic complexity, serves as the backdrop for this investigation into creating an innovative AI model capable of replicating the decision-making processes and playing styles characteristic of skilled human players.</p> <p>The study delves into the analysis of human player behavior to understand strategies, patterns, and nuances. Utilizing machine learning, particularly reinforcement learning, the research aims to design an AI model that learns from historical human gameplay data, effectively mimicking human playing styles.</p> <p>Algorithms will adjust the AI's skill level and playing style based on observed patterns and opponent strategies, providing a more challenging gaming experience. User interaction features will allow players to customize the AI's behavior, enhancing engagement.</p> <p>Ethical considerations, such as fair play and privacy, are addressed. Methodology involves human player behavior analysis, machine learning model development, user testing, and performance evaluation against human players.</p> |
| Keywords (3-5 words) | 1. Chess AI 2. Human player behavior 3. Machine learning 4. Dynamic skill adaptation 5. Deep Learning |
| References (05-07 Research papers in IEEEformat) | 1. https://ieeexplore.ieee.org/abstract/document/9392188 2. https://www.mdpi.com/1099-4300/24/4/550 3. https://dl.acm.org/doi/abs/10.1145/3394486.3403219 4. https://www.cs.toronto.edu/~ashton/pubs/maia-personalized2021.pdf 5. https://dl.acm.org/doi/abs/10.1145/3534678.3539367 6. https://dl.acm.org/doi/10.1145/3349537.3351904 |

Seminar Guide Name
(Sign with date)

Seminar Coordinator Name
(Sign with date)