

# Artificial Intelligence Notes Reviewer

The AI reviewer provides a foundational understanding of the field, moving from theoretical concepts to modern applications. We emphasize the core mechanisms that drive intelligent systems, including search algorithms and the various paradigms of machine learning.

- Introduction to AI concepts: definitions, history, and applications in modern technology.
- Search algorithms: a comparison of uninformed (Depth-first, Breadth-first) and informed ( $A^*$ , Greedy) search techniques and their efficiency trade-offs.
- Machine learning basics: differentiating between supervised, unsupervised, and reinforcement learning methods.
- Key AI topics: an overview of Bayesian probability, the architecture of neural networks, and fundamental concepts in Natural Language Processing (NLP).
- Ethical considerations and future trends in AI, including fairness, transparency, and the societal impact of automation.

The notes are synthesized from introductory university courses and practical application guides, ensuring a balanced view of theory and practice.

