

Review of: "SnakeChat: a conversational-AI based app for snake classification"

Mei Hua Hsu¹

¹ Chang Gung University of Science and Technology

Potential competing interests: No potential competing interests to declare.

Comments: major revision

1. The paper discusses the classification of snakes, a topic relevant to both the general public and experts. However, it only explores the classification of snakes using the GPT Vision API and the chatGPT/GPT-4 API. There are over 2,000 species of snakes worldwide, and focusing on just a few species might limit the practical applicability of the system. Scaling this prototype to cover a broader range of snake species could be challenging and might require significantly more data and resources.
2. The paper mentions that the best result was achieved when using the GPT-4 API, which was expected. However, it lacks detailed performance metrics or a thorough analysis of the performance differences between GPT-4, chatGPT, and the GPT Vision API. Without specific metrics or detailed comparisons, the assessment of which model performs better for this specific task remains unclear.
3. While the integration of APIs is highlighted as a success, the paper might not delve deep enough into the technical details of how these APIs were integrated. A more detailed discussion of the methodology, challenges faced during integration, and the limitations of the approach would enhance the paper's depth and credibility.
4. The paper assumes that the use of current technologies has the potential to contribute to sparking research in bioinformatics, bringing together computer scientists and biologists. However, it doesn't explicitly discuss the limitations or challenges in integrating AI with complex biological sciences. Further discussions on the potential challenges and limitations in scaling this prototype in real-world scenarios could be beneficial.
5. There might be ethical considerations regarding the deployment of AI systems for classification, especially in domains like medicine (e.g., finding the right snake serum). Addressing ethical concerns, potential biases in the AI models, and the need for human oversight in critical decision-making processes could be important but is not explicitly discussed in the paper.