

Lesson 1.2: Evolution of GPT Models: GPT-1 to GPT-4

Objective:

By the end of this lesson, students will have a comprehensive understanding of the development and advancements of the GPT series, from GPT-1 to GPT-4, and the resulting emergence of ChatGPT.

Duration: 60 minutes

Materials:

- Presentation slides
- Video clips highlighting milestones in the GPT series
- Whiteboard or digital board for illustrations and diagrams
- Handout with key points and additional resources

Lesson Outline:

Introduction (5 minutes)

- Overview of lesson objectives
- Importance of understanding the GPT series' evolution

GPT-1: The First Generation (10 minutes)

- Presentation on the architecture and capabilities of GPT-1
- Discussion of GPT-1's limitations and its impact on NLP

GPT-2: Improved Scaling and Performance (15 minutes)

- Introduction to GPT-2's architecture and its improvements over GPT-1
- Explanation of the WebText dataset and GPT-2's increased capacity
- Controversy surrounding GPT-2's release and its implications

GPT-3: A Giant Leap Forward (15 minutes)

- Presentation on GPT-3's massive scale and capabilities
- Discussion of GPT-3's applications and its impact on AI research
- Introduction of the ChatGPT model based on GPT-3

GPT-4: The Latest Advancement (10 minutes)

- Overview of GPT-4's improvements and its influence on ChatGPT
- Discussion of GPT-4's potential applications and future research
- Setting the stage for the rest of the course focusing on ChatGPT

Conclusion and Q&A (5 minutes)

- Recap of key points from the lesson
- Open the floor for questions and discussions
- Distribute handout with key points and additional resources for further reading

Assessment:

- Students will participate in discussions throughout the lesson.
- Students will complete a short quiz at the end of the lesson to assess their understanding of the key concepts.

Homework:

- Read the assigned articles on the GPT series for a deeper understanding.
- Prepare for the next lesson by reviewing the core features and benefits of ChatGPT.