



ALPHABOT (Autopilot Speech-to-text Assistant)

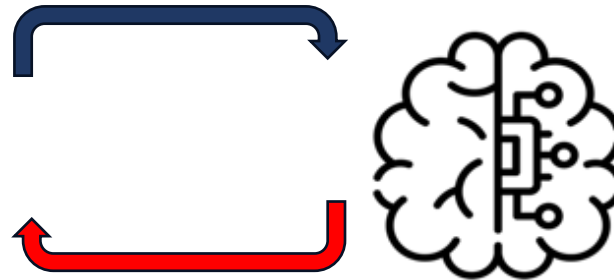
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ALPHABOT (Autopilot Speech-to-text Assistant)

- ✓ Effective communication is crucial for air traffic controllers, especially in the early stages of their training;
- ✓ Immersive environment for practicing ATCO-pilot communication;
- ✓ Generative AI-enhanced tool, designed to accelerate and improve the phonetic and communicative skills





ALPHABOT (Autopilot Speech-to-text Assistant)



Speech-to-Text (STT) Module

Advanced STT algorithms, fine-tuned with a dedicated ATCO-Pilot conversations dataset (ICAO alphabet and rules).



LLM Module

Dedicated prompt to generate an appropriate and contextually accurate pilot response, simulating real-life communication



Text-to-Speech (TTS) Module

Response converted into natural-sounding speech

Instruction recognition Module

Detects and translates the LLM output into instructions for FDP