Reference Notes

This document provides a comprehensive overview of leading AI models and ML Frameworks available across various tasks—text, image, video, and audio. It serves as a quick reference for trainees and practitioners to understand which models are best suited for specific applications, their licensing (open source or paid), cost considerations, and where to access their APIs or documentation.

AI Models

Model Name	Open Source / Paid	Price (if Paid)	Task Category	Best Use Case / Strengths	API Availability & Access	Documentation Link
Text Models						
GPT-4	Paid	Varies by usage (OpenAI API)	Text Generation	General purpose LLM, strong contextual understanding	OpenAI API	OpenAI Docs
GPT-3.5	Paid	Varies by usage (OpenAI API)	Text Generation	Cost-effective alternative to GPT-4	OpenAI API	Same as GPT-4 above
LLaMA 2	Open Source	Free	Text Generation	Open research, fine-tunable	Self-host or Hugging Face	Meta AI LLaMA 2
Claude	Paid	Varies (Anthropic API)	Text Generation	Ethical LLM, safer completions	Anthropic API	Anthropic Docs
BLOOM	Open Source	Free	Text Generation	Multilingual, large-scale open model	Hugging Face	BigScience BLOOM
Gemini (Google DeepMind)	Paid	Varies (Google Cloud AI)	Text Generation, Conversational AI	Strong multi-modal and reasoning abilities	Google AI Studio	https://ai.google.d api/docs?authuser=1
Image Models						
DALL·E 2	Paid	Varies (OpenAI API)	Text-to-Image/Image to text	High-quality image generation from prompts	OpenAI API	OpenAI Image Docs
Imagen	Paid	Varies (Google Cloud AI)	Text-to-Image/Image to text	High Quality Image and Caption generation	Google AI Studio	https://ai.google.d api/docs?authuser=1
Stable Diffusion	Open Source	Free	Text-to-Image/Image to text	Customizable, runs locally or cloud	Stability AI API	Stable Diffusion Gi
Midjourney	Paid	Subscription-based	Text-to-Image/Image to text	Artistic image generation	Web-based, Midjourney	Midjourney Docs
Video Models						

Model Name	Open Source / Paid	Price (if Paid)	Task Category	Best Use Case / Strengths	API Availability & Access	Documentation Link
Veo 2	Paid	Varies ([Google Cloud AI](#))	Text/Image to Video	5-8 sec video gen	Google AI Studio	[https://ai.google.d api/docs?authuser=1](#)
Runway Gen-2	Paid	Subscription/API pricing	Text-to-Video	Video generation from text prompts	Runway API	Runway Docs
Phenaki	Research/Open	N/A	Text-to-Video	Early research-stage model for video gen (this is not available public ally added here just for your reference)	No public API	[Phenaki Paper](#)
Synthesia	Paid	Subscription-based	Video Synthesis	AI avatars and video creation	Proprietary API	Synthesia Docs
Audio Models						
Whisper	Open Source	Free	Speech-to-Text	Robust transcription and translation	[OpenAI Whisper API](#) or self-hosted	[Whisper GitHub](#)
ElevenLabs	Paid	Subscription-based	Text-to-Speech and Speech to text	High-quality, natural voice synthesis	ElevenLabs API	ElevenLabs Docs
VALL-E	Research/Open	N/A	Voice Cloning	Voice synthesis from a few seconds of audio(this is not available public ally added here just for your reference)	No public API	[VALL-E Paper](#)

ML Frameworks

Framework Name	Documentation Link	Compatible Languages	Compatible Frontend Tech	Compatible Backend Tech	Known Incompatibi
LangChain	https://docs.langchain.com/	Python, JavaScript	React, Vue, Angular, others	Python (Flask, FastAPI), Node.js	Limited sup Python/JS e
Vercel AI SDK	https://sdk.vercel.ai/docs/introduction	TypeScript	React, Next.js, Vue (Nuxt), Svelte (SvelteKit), SolidJS	Node.js	Mainly sup JavaScript/ limited non

Framework Name	Documentation Link	Compatible Languages	Compatible Frontend Tech	Compatible Backend Tech	Known Incompatibi
Haystack	https://docs.haystack.deepset.ai/	Python	Any (API based)	Python (Django, FastAPI)	Primarily F
MLflow	https://mlflow.org/docs/latest/index.html	Python, R, Java, REST	Any (API based)	Any backend supporting REST	More focuse lifecycle,
BentoML	https://docs.bentoml.org/	Python	Any (API based)	Python	Limited mul support
Prefect	https://docs.prefect.io/	Python	Any (API based)	Python	Primarily f orchestrati
TFX (TensorFlow Extended)	https://www.tensorflow.org/tfx	Python	Any (API based)	Python (TensorFlow ecosystem)	TensorFlow- multi-frame
Metaflow	https://docs.metaflow.org/	Python	Any (API based)	Python	AWS-centric integration