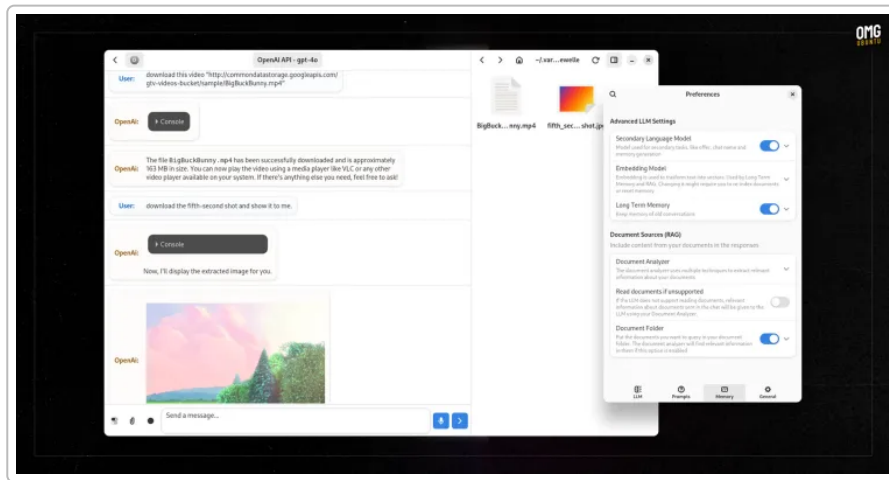


## Desktop AI Assistants (GUI)

- **PyGPT (Open Source):** A Python-based cross-platform desktop AI assistant that uses GPT-4/5, DALL-E, Whisper, etc., for chat, image/video generation, vision, and more <sup>1</sup>. Its **Agents** mode lets it handle multi-step tasks and even *execute system commands and custom Python scripts* directly on your Linux machine <sup>1</sup>. PyGPT integrates deeply with the OS: it can manage files, run shell commands, fetch web search results, and connect to external services as needed. The app is free and open source <sup>1</sup> (GitHub: [szczyglis-dev/py-gpt](https://github.com/szczyglis-dev/py-gpt); Snap: available on Snapcraft).



**Newelle (Open Source):** A GTK4-based AI assistant for GNOME desktops (available via Flathub) that fronts LLMs either locally (Ollama) or in the cloud (ChatGPT, Gemini, Claude, Groq, etc.). It supports chat with files, **voice I/O**, web searches, and even *runs terminal commands* on your behalf <sup>2</sup>. Newelle provides long-term memory and prompt profiles, and includes a built-in file manager with “AI-powered” file operations. Notably, it can “chat” with document contents and manage files via AI <sup>2</sup>, making it more agentic than a simple chatbot.

- **Almond (Open Source):** Stanford’s “Almond” is an open virtual assistant with a GNOME desktop front-end <sup>3</sup>. It uses Thingpedia as a service repository, so you can issue natural-language commands to control web services, news, IoT devices, etc. It supports voice wake-word (“Almond”) and understands **compound commands** via a deep semantic parser <sup>3</sup>. Almond is free (Apache 2) and available on Flathub (GNOME integration) and other platforms.

- **Sire (Open Source):** A slick cross-platform desktop AI assistant that implements the **Model Context Protocol (MCP)** <sup>4</sup>. It connects to major LLM providers (OpenAI, Anthropic, Google, Mistral, etc.), supports a local RAG knowledge base, and can load and vectorize documents (PDF, DOCX, etc.) for retrieval-augmented conversations. Crucially, Sire leverages MCP to attach *tools* (MCP servers) to the AI, so the model can “see” and manipulate your file system, query databases, gather system info, or call custom utilities <sup>4</sup>. This effectively gives the assistant autonomous access to OS resources instead of mere chat. Sire is fully free and open source <sup>5</sup> (source code on GitHub, installer available for Linux/Windows/Mac).

- **Jan.ai (Open Source):** A privacy-focused, local-first AI assistant that can run entire LLMs on your machine <sup>6</sup>. Jan lets you download and host models (Llama, Gemma, Qwen, etc.) or connect to

cloud models (OpenAI GPT, Anthropic Claude, Mistral, etc.) from one app. It includes connectors for email, calendar, files and more (“Jan works where you work”), and even supports the MCP standard for agentic workflows. In effect, Jan is an offline-capable ChatGPT alternative that you control <sup>6</sup>. The app is free and open source <sup>6</sup> (Linux installer on [jan.ai](https://jan.ai)).

## Command-Line / Terminal AI Agents

- **Gemini CLI (Open Source, Google):** An official Google agent in your terminal. Gemini CLI brings the Gemini 2.5 Pro LLM to Linux consoles for coding, research, writing, or system tasks <sup>7</sup>. It’s fully open-source (Apache 2.0) and extensible <sup>8</sup>. Out of the box it can perform code completion, content generation and even *execute shell commands*, embed web search results, and manipulate files—all via natural-language prompts <sup>9</sup>. Developers can script Gemini CLI in non-interactive mode for automation and link it with tools via MCP or bundled extensions <sup>9</sup> <sup>8</sup>. (Repo: [google/gemini-cli](https://github.com/google/gemini-cli).)
- **Neo AI (Open Source):** A Linux terminal assistant built as a TUI (text UI) application <sup>10</sup>. Neo interprets your instructions to run real commands: it has “Intelligent Command Execution” and “Multi-Protocol Support” (it can act on terminal, filesystem, network, and security sub-systems) <sup>11</sup>. For example, you can ask Neo to list or summarize folder contents, run package updates, scan the network, or automate cybersecurity tasks, and it will do so (with your approval) using an AI backend. It supports multiple AI backends (local Llama via LM Studio or cloud models via DigitalOcean) and shows output with syntax highlighting. Security is built in: Neo prompts you to confirm before taking critical actions <sup>11</sup>. The source is open (BSD 3-Clause) on GitHub.
- **Others (CLI Tools):** There are additional terminal-based AI helpers. For instance, *AIChat* (by sigoden) is an open CLI tool that converts natural language into shell commands and supports agent plugins (RAG, function calling). These are rapidly evolving; Gemini CLI and Neo AI exemplify this category.

## Voice and Embedded AI Platforms

- **Mycroft AI (Open Source):** The flagship open voice assistant (Apache 2.0) for Linux. Mycroft Core lets you run a voice agent on desktops, Raspberry Pis, or custom hardware <sup>12</sup>. It supports speech-to-text, text-to-speech, and “*skills*” (voice apps) for tasks like weather, media playback, home automation, etc. The system is modular and privacy-first; by default it does not send your data to big servers. (See [MycroftAI.org](https://mycroftai.org) and GitHub for code.)
- **OpenVoiceOS (Open Source):** A community-driven voice assistant OS (successor to MycroftOS). OVOS provides a prebuilt Linux image or container stack that bundles an enhanced Mycroft-core and companion software <sup>13</sup>. You can install OVOS on a Raspberry Pi, desktop or smart speaker. It features an entirely open voice stack (STT/TTS plugins) and is experimental by design <sup>13</sup> <sup>14</sup>. Like Mycroft, OVOS is free, Apache-licensed, and focuses on giving developers a blank slate for custom voice agents.
- **Other Voice/Virtual Assistants:** Beyond Mycroft/OVOS, there are other efforts. For example, Rhasspy is an offline speech assistant toolkit for Linux homes, and Stanford’s Almond (above) also supports voice. Commercial voice agents (Google Assistant, Alexa) are not natively available on Linux.

## Comparison Summary

Assistant	Type & License	Key Capabilities (Agentic Tools)	Platforms	Source/Links
<b>PyGPT</b>	GUI App (MIT, OSS)	Chat, vision, coding, autonomous “Agent” mode; executes shell/Python commands <sup>1</sup>	Linux/Win/Mac	<a href="#">GitHub: py-gpt</a>
<b>Newelle</b>	GUI App (GPL, OSS)	LLM frontend (OpenAI/Gemini/etc.), voice chat, web search; can run terminal commands, manage files <sup>2</sup>	Linux (GNOME)	<a href="#">Flathub</a>
<b>Sire</b>	GUI App (OSS)	MCP client: supports plugins/tools for file system, DB, RAG, etc. <sup>4</sup>	Cross-platform	<a href="#">Sire.app</a> (GitHub link)
<b>Jan.ai</b>	GUI App (MIT, OSS)	Offline-capable LLMs (Llama, Gemma, etc.), connectors (email, calendar), MCP support <sup>6</sup>	Linux/Win/Mac	<a href="#">jan.ai</a>
<b>Almond</b>	GUI App (Apache, OSS)	Virtual assistant (Thingpedia): compound NLP, IoT/web integration <sup>3</sup>	Linux (GNOME)	<a href="#">GitHub: almond-gnome</a>
<b>Gemini CLI</b>	CLI (Apache, OSS)	Terminal AI agent (Gemini 2.5); code completion, docs, tasks; can invoke shell commands, web search <sup>9</sup>	Linux (CLI)	<a href="#">github.com/google/gemini-cli</a>
<b>Neo AI</b>	CLI (BSD, OSS)	AI-enhanced shell; executes commands, navigates folders, network security tasks <sup>10</sup> <sup>11</sup>	Linux (CLI)	<a href="#">github.com/vasco0x4/neo-ai</a>
<b>Mycroft AI</b>	Voice Agent (Apache)	Open voice assistant; supports speech I/O and “skills” (apps) for system/home tasks <sup>12</sup>	Linux (desktop, Pi)	<a href="#">mycroft.ai</a> (GitHub)
<b>OpenVoiceOS</b>	Voice OS (Apache)	Voice assistant platform (Mycroft fork) with multi-device support and plugins <sup>13</sup> <sup>14</sup>	Linux (OS/container)	<a href="#">openvoiceos.org</a>

**Sources:** For each assistant above, features and capabilities are documented in the linked sources <sup>1</sup> <sup>2</sup> <sup>4</sup> <sup>6</sup> <sup>9</sup> <sup>10</sup> <sup>12</sup>. These include official project sites, documentation, and news articles. (Links in table are official sites or GitHub repos.)

- 1 PyGPT – Open-source Desktop AI Assistant for Windows, macOS, Linux  
<https://pygpt.net/>
- 2 Newelle, AI "Assistant" for GNOME, Hits Version 1.0 - OMG! Ubuntu  
<https://www.omgubuntu.co.uk/2025/08/newelle-ai-assistant-ubuntu-linux-desktop>
- 3 GitHub - stanford-oval/almond-gnome: The Almond Virtual Assistant, Linux desktop version  
<https://github.com/stanford-oval/almond-gnome>
- 4 5 Sire - A Sleek Desktop AI Assistant and MCP (Model Context Protocol) Client  
<https://5ire.app/>
- 6 Best Open Source Linux AI Assistants 2025  
<https://sourceforge.net/directory/ai-assistants/linux/>
- 7 8 9 Google announces Gemini CLI: your open-source AI agent  
<https://blog.google/technology/developers/introducing-gemini-cli-open-source-ai-agent/>
- 10 11 GitHub - Vasco0x4/Neo-AI: Neo AI integrates into the Linux terminal, capable of executing system commands and providing helpful information.  
<https://github.com/Vasco0x4/Neo-AI>
- 12 Mycroft download | SourceForge.net  
<https://sourceforge.net/projects/mycroft.mirror/>
- 13 14 Home  
<https://www.openvoiceos.org/>