



Project 1

# OpenAI and Coding Assistant



# OpenAI Oss Models

# Pros

# Integrated Solutions



Easily editable for your use case

- Open Source
- Customisable Options



3 Modes to prioritize speed or accuracy

- High
- Medium
- Low

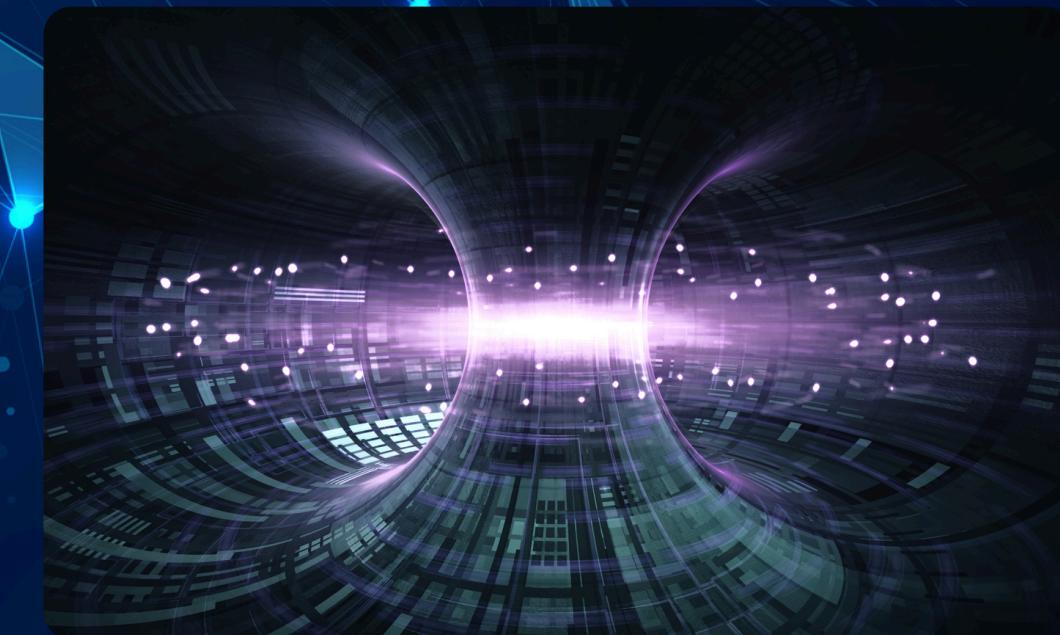


Editable

# Intergrated Soltutions



Accessible to Process



Heavy Quantization

# Models



## GPT-Oss 120b

made more for larger applications,  
the 120 billion parameters are a  
large reason for its higher precision



## GPT-Oss 20b

more for regular people to edit and  
run locally, this model is made to  
be for smaller businesses or  
individuals

# Cons

# Cons

## 01 GPT-OSS 20b

- Still large for its accuracy
- Gemma's lightweight model has only 270 million parameters, making it small enough to run efficiently on mobile devices while maintaining comparable accuracy for certain tasks.

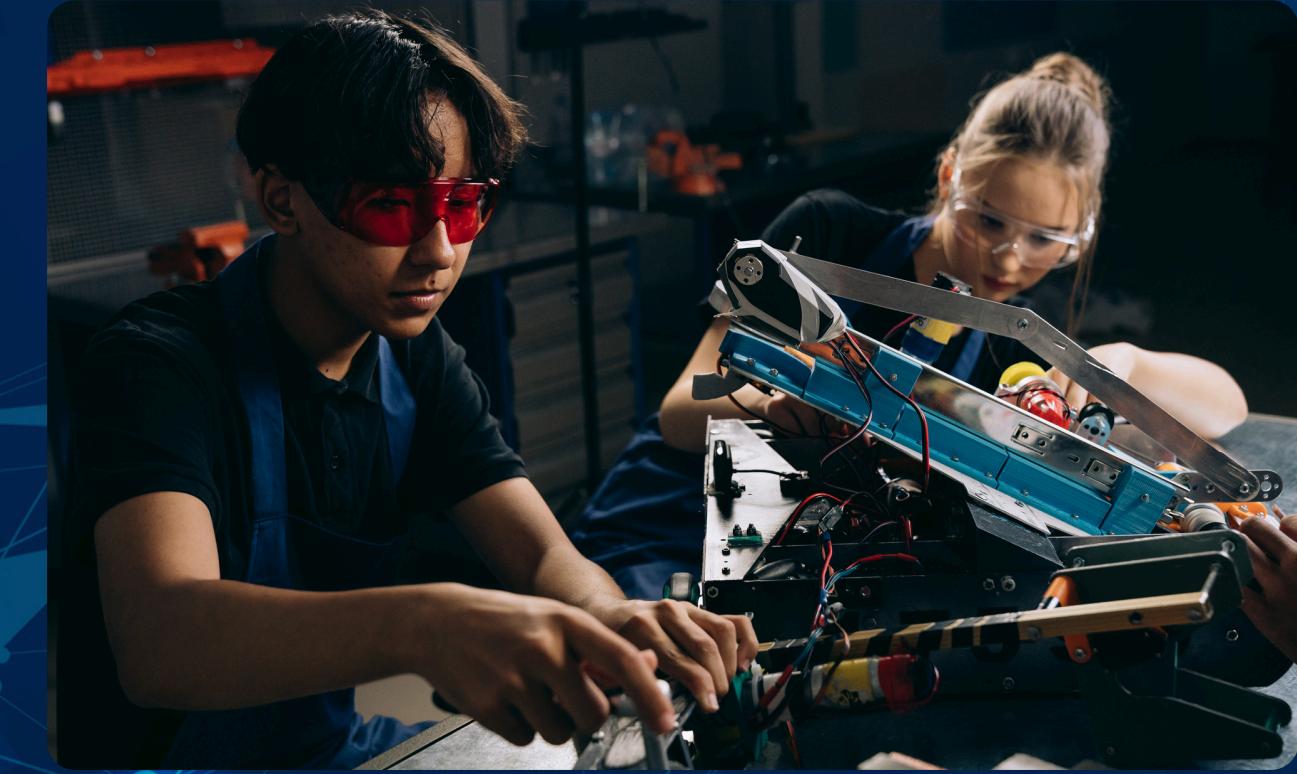
## 02 GPT-OSS 120b

- Very expensive to run
- Relatively accurate for its size compare to large models like DeepSeek
  - Performance gains from adding more parameters flatten out – the curve looks more like a logarithm than a line.



# Applicability

# Coding Assistant



OpenAI models understand programming languages like natural language.

Can generate, autocomplete, and refactor code in real time.

Used in tools such as GitHub Copilot and ChatGPT.

Speeds up development and reduces repetitive coding tasks.

Lets developers focus on logic, design, and problem-solving instead of syntax.

# Debugging and Code Review

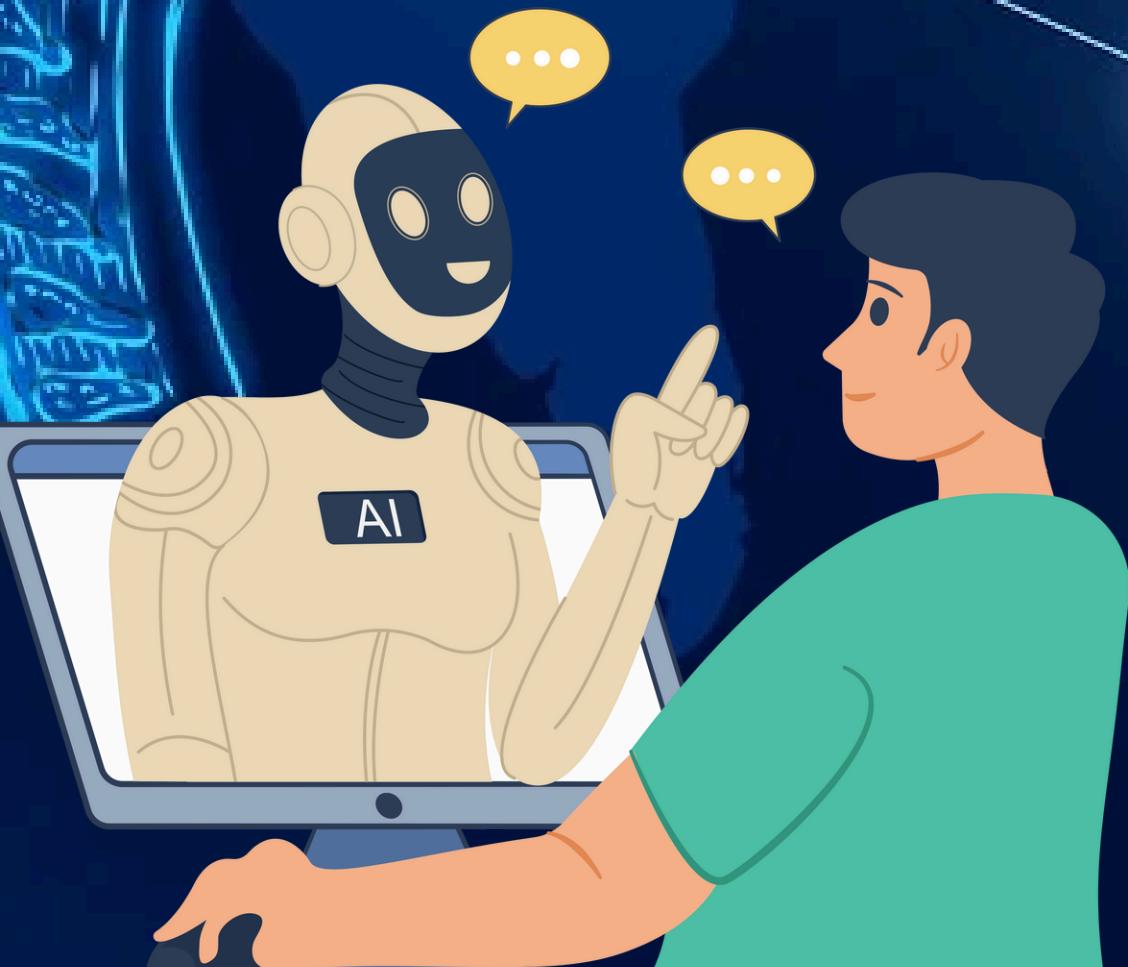
- Developers can paste code or error messages into ChatGPT to receive human-like explanations and receive suggested fixes.
- AI models can review code, detect logic errors, and suggest improvements for cleaner, more efficient code.



```
content: "";
content: none;
}
table {
border-collapse: collapse;
border-spacing: 0;
}
button, input, select, textarea { margin: 0 }
:focus { outline: 0 }
a:link { -webkit-tap-highlight-color: #FF5E99 }
img, video, object, embed {
max-width: 100%;
height: auto!important;
}
iframe { max-width: 100% }
blockquote {
font-style: italic;
font-weight: normal;
font-family: Georgia,Serif;
font-size: 15px;
padding: 0 10px 20px 27px;
position: relative;
margin-top: 25px;
}
blockquote:after {
position: absolute;
content: '"';
}
blockquote p { margin-bottom: 10px }
strong, b { font-weight: bold }
em, i, cite {
font-style: normal;
font-family: arial;
}
small { font-size: 100% }
figure { margin: 10px 0 }
code, pre {
font-family: monospace,consolas,sans-serif;
font-weight: normal;
font-style: normal;
}
pre {
margin: 5px 0 20px 0;
line-height: 1.3em;
padding: 8px 10px;
overflow: auto;
}
pre code {
margin: 0 8px;
font-size: 1.5em;
border: 1px solid black;
border-radius: 5px;
padding: 0 2px;
background-color: black;
color: white;
}
```

# Learning and Education

- They can explain difficult concepts, provide short lessons, and offer real examples in almost any programming language.
- Many educators and students use tools like ChatGPT as an interactive companion to reinforce what they learn in class.



# Industry Applications

- OpenAI's technologies extend beyond coding into areas like speech and vision.
- Whisper: Transcribes voice commands into code or notes – supports hands-free programming and accessibility.
- CLIP: Connects images and text, enabling tools that link visual inputs with programming tasks.
- Together, these models drive innovation in creativity, automation, and accessibility across digital fields.





Thank You

# Resource Page

- Awan, A. A. (2025, May 7). Building fun projects with OpenAI Codex. KDnuggets. <https://www.kdnuggets.com/building-fun-projects-with-openai-codex>
- DeepSeek-AI. (n.d.). DeepSeek-V3.2-Exp [Model card]. Hugging Face. <https://huggingface.co/deepseek-ai/DeepSeek-V3.2-Exp>
- Google DeepMind. (2025). Gemma 3 (270M IT) [Model card]. Hugging Face. <https://huggingface.co/google/gemma-3-270m-it> Hugging Face
- OpenAI. (n.d.). Codex – OpenAI Platform. <https://platform.openai.com/docs/codex>
- OpenAI. (2025). gpt-oss-120b [Model card]. Hugging Face. <https://huggingface.co/openai/gpt-oss-120b> Hugging Face
- OpenAI. (2025). gpt-oss-20b [Model card]. Hugging Face. <https://huggingface.co/openai/gpt-oss-20b> Hugging Face
- OpenAI. (n.d.). Introducing Codex. <https://openai.com/index/introducing-codex>
- OpenAI. (n.d.). Introducing Whisper. <https://openai.com/index/whisper/>
- OpenAI. (n.d.). Whisper model. <https://platform.openai.com/docs/models/whisper>
- Wikipedia contributors. (n.d.). Contrastive Language–Image Pre-training (CLIP). Wikipedia. [https://en.wikipedia.org/wiki/Contrastive\\_Language–Image\\_Pre-training](https://en.wikipedia.org/wiki/Contrastive_Language–Image_Pre-training)