

Experiments with ChatGPT, Copilot, and Midjourney

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Something new

- Cutting-edge technology
- Capable of understanding and generating
- Trained on vast amounts of data





Nothing new

1. Don't install random software or plugins
2. Be careful what you expose to the internet
3. Don't trust what you read on the internet



Overview of AI Tools

Images

Name	Functions	Price	Free Tier
Midjourney	Text-To-Image, Image-To-Text, Image-To-Image	\$10+/month	Limited
Dall-E 2 (OpenAI)	Text-To-Image, Inpainting, Outpainting, Variations	Usage-Based	No (?)
Stable Diffusion 2	Text-To-Image, (Inpainting, Outpainting)	Open-Source, Paid Hosting	Open- Source
Leonardo AI	Text-To-Image, Image-To-Image	n.A.	Daily Limit

Midjourney Demo





Video / Audio

Name	Functions
ElevenLabs	Voice Cloning (Text-to-Speech)
Voice A.I.	Voice Cloning (Speech-to-Speech)
Soundraw	Music
Lumen 5	Video



In-Browser Chats ("Google++")

Name	Modell	Price	Free Tier
ChatGPT (OpenAI)	GPT-3.5, GPT-4	\$20/month	GPT3.5 + API Credits
Phind	"The AI search engine for developers."	-	Free
dalai / Alpaca	LLaMa (Facebook)	-	complicated
Bard (Google)	PaLM 2	???	Probably Yes
Huggingface Models	several pre-trained models	depends	Yes

ChatGPT Demo



Testimonials

“ I don't need to google things as often [...] That makes me extremely efficient. I doubled the amount of code I'm producing over the same period of time. Even if it is about 70% - 80% accurate, is our job to take care of the rest 20% - 30% isn't it? ”

Comment from Sizu on https://www.youtube.com/watch?v=C_teb93aIL4

Testimonials

“ The way I use ChatGPT for programming is to have it write a simple example of how to use a function or library for a specific task, and then use its answer as a reference, while also double checking things using documentation or Google.

Comment from Matthew on https://www.youtube.com/watch?v=C_teb93aIL4

Testimonials

“ I treat chatgpt as my very knowledgeable assistant. It helps me going in the right direction. There have been many times where it pointed me to a library, or a specific method in a library or framework, which I forgot about or just hadn't used before. ”

Comment from Moje Konto on https://www.youtube.com/watch?v=C_teb93aIL4

In-Editor Coding Assistants ("IntelliJ++")

Name	Functions	Price	Free Tier	Enterprise
Github Copilot (+ Labs)	Real-time code suggestions, (+ Refactor, Explain, Translate)	\$10/month	30 day trial	Policies, "Privacy"
tabnine	Real-time code suggestions, ???	\$15/month	Yes; +14 day pro	Self-Hosted
Amazon Code Whisperer	Real-time code suggestions, AWS-Focus, Security Scan, Reference Tracker	\$19/month	Yes	Policies
Genie (== ChatGPT)	Refactor, Explain, Generate, Translate	GPT-API	Yes	-

In-Editor Demo

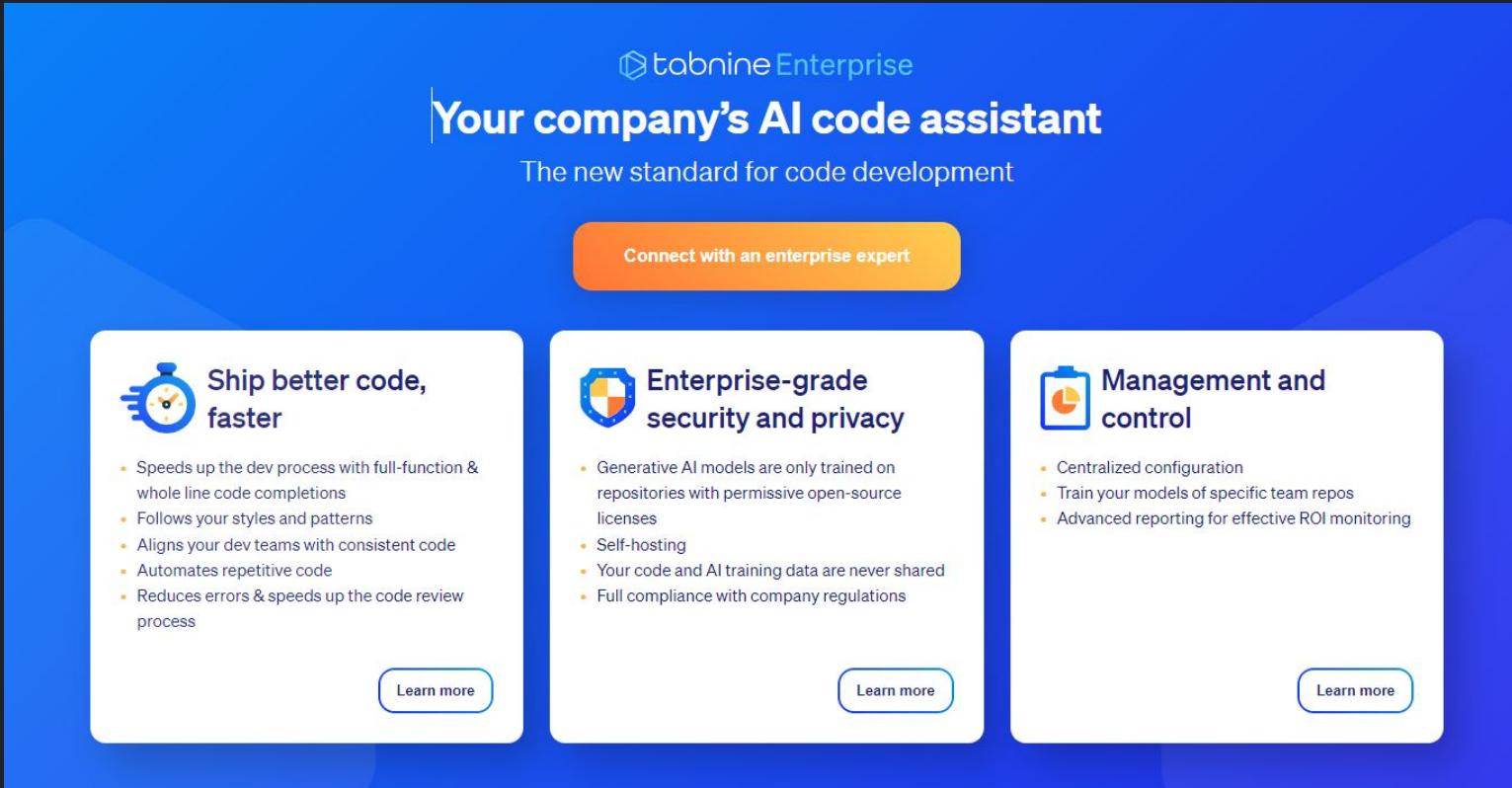


Summary

- Abundance of novel tools is emerging at a rapid pace.
- In-Editor Codings Assistants ("IntelliJ++")
 - Currently off-limits
 - Many different choices
- In-Browser Chatbots ("Google++")
 - Should be fine to use

The future?

- Self-Hosted "Enterprise" Tools?
- Open Source In-Editor Tools?
- Pre-trained models fine-tuned on own code?



The screenshot shows the Tabnine Enterprise landing page. At the top, it features the Tabnine logo and the text "Your company's AI code assistant" followed by "The new standard for code development". A prominent orange button says "Connect with an enterprise expert". Below this, there are three main features highlighted in white boxes:

- Ship better code, faster** (Icon: stopwatch)
 - Speeds up the dev process with full-function & whole line code completions
 - Follows your styles and patterns
 - Aligns your dev teams with consistent code
 - Automates repetitive code
 - Reduces errors & speeds up the code review process[Learn more](#)
- Enterprise-grade security and privacy** (Icon: shield)
 - Generative AI models are only trained on repositories with permissive open-source licenses
 - Self-hosting
 - Your code and AI training data are never shared
 - Full compliance with company regulations[Learn more](#)
- Management and control** (Icon: clipboard)
 - Centralized configuration
 - Train your models of specific team repos
 - Advanced reporting for effective ROI monitoring[Learn more](#)

