

OpenAI Tools Mastery:

A Comprehensive 3-Hour
Hands-on Workshop

Workshop Overview

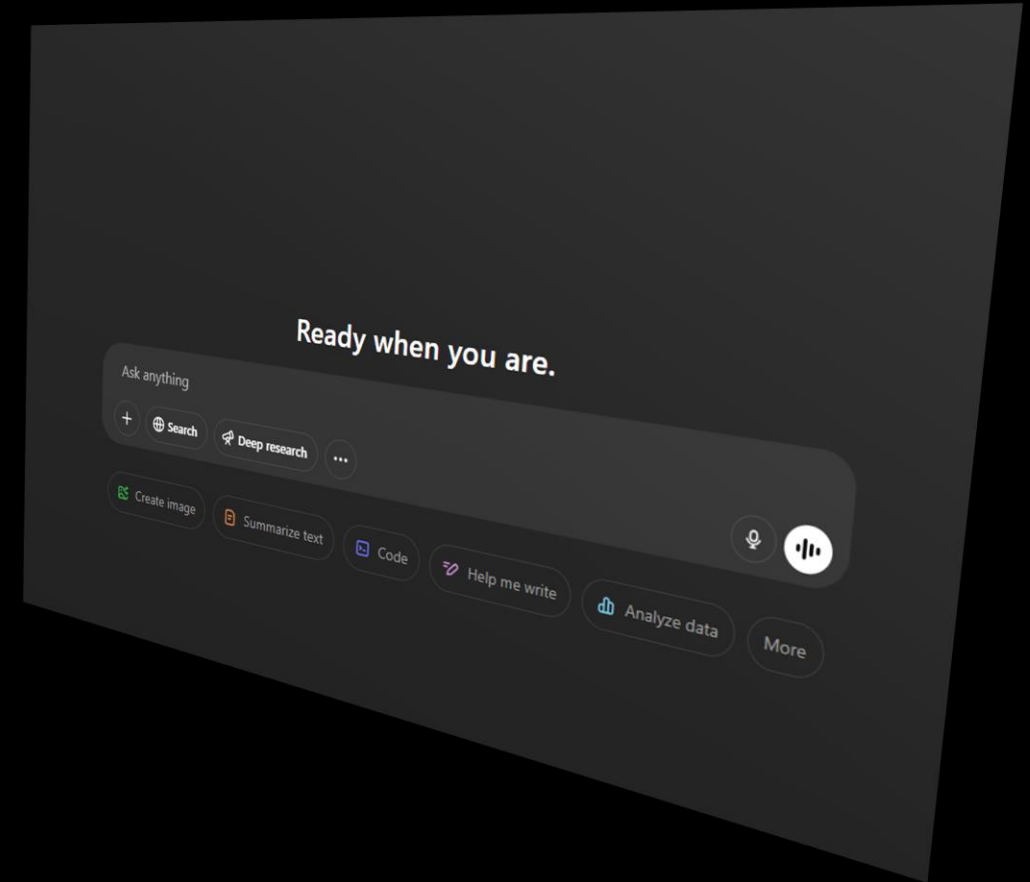
- Hands-on experience with OpenAI tools
- Learn ChatGPT interactions
- Explore advanced API integrations
- Increase productivity with AI
- Create custom AI applications



The OpenAI Platform



- Leading generative AI models
- Innovative GPT and multimodal systems
- User-friendly interfaces and customization
- Comparison with competitors
- Community support for learning



Generative AI Landscape

- Overview of generative AI
- Comparison with Google, Anthropic, and Perplexity
- State-of-the-art performance
- Ease of use for different users
- Community resources for newcomers



Tools and Requirements for this Workshop



Account Requirements:

- An OpenAI account (free tier is sufficient for most modules, but a ChatGPT Plus subscription (\$20/month) is recommended for full access to all features)
- For API usage: An OpenAI API key with payment method attached (modules will use minimal credits, typically less than \$1 total)

Hardware/Software Requirements:

- A modern web browser (Chrome, Firefox, Safari, or Edge)
- Stable internet connection
- Microphone access (for the voice module)
- Camera access (for the vision module)
- A code editor (for API examples - Visual Studio Code recommended)
- Node.js installed (for running API examples)



Tools and Requirements for this Workshop

Recommended Prior Knowledge:

- Basic computer literacy
- Familiarity with web applications
- Basic understanding of programming concepts (for API module)
- Basic understanding of JavaScript helpful but not required

Workshop Materials:

- Workshop slides (will be provided)
- Code samples repository: available on GitHub
- Example prompt library for exercises
- Sample documents for the document conversion module



Accessing the OpenAI Environment



Creating an OpenAI Account:

- Open your web browser and navigate to <https://openai.com>
- Click on the "Sign Up" button in the top-right corner of the page
- Enter your email address and create a password, or use Google/Microsoft/Apple account options for faster signup
- Verify your email address by clicking the link sent to your inbox
- Complete the verification process, which may include phone verification

Setting Up Multi-Factor Authentication (MFA)

- After logging in, click on your profile icon in the top-right corner
- Select "Settings" from the menu
- Navigate to the "Security" tab
- Under "Multi-factor authentication," click "Enable"
- Follow the prompts to set up an authenticator app (like Google Authenticator)
- Store your recovery code in a safe place



Accessing the OpenAI Environment

Setting Up API Access (for Module i)

- Log in to your OpenAI account at <https://platform.openai.com/>
- Navigate to the "API keys" section in the left sidebar
- Click "Create new secret key"
- Give your key a descriptive name
- Copy and securely store your API key - it will only be shown once
- Set up usage limits to control spending (recommended for workshop purposes)

Disable model training on your data

- After logging in, click on your profile icon in the top-right corner
- Select "Settings" from the menu
- Navigate to the "Data controls" tab
- Set "Improve the model for everyone" to Off

Navigating Between Different OpenAI Interfaces

- ChatGPT: Access at <https://chat.openai.com/>
- API Documentation: Access at <https://platform.openai.com/docs>
- API Playground: Access at <https://platform.openai.com/playground>
- Custom GPT Creation: Access at <https://chat.openai.com/create>



Module Walkthroughs



See the lab workbook for details on the modules below:

- a) ChatGPT Practical Walkthrough
- b) Custom GPTs
- c) Prompt Engineering
- d) Model Comparison
- e) Code Generation
- f) Document Conversion
- g) Vision Model
- h) Realtime Voice
- i) API

