



AI 101

Todd Klindt

Todd Klindt



18 Year SharePoint MVP
Blogger, Speaker, Consultant at Sympraxis
Consulting, Not a Developer

todd.klindt@sympraxisconsulting.com
@toddklindt

<https://www.toddklindt.com/Techorama>



Agenda

- ◆ What is AI?
- ◆ What is the focus for our discussion?
- ◆ How should I use it?
- ◆ Here are the tools I use?



The image features a decorative border at the top and bottom, consisting of a red band with small yellow stars, and a yellow band with vertical purple stripes. The text "In the beginning..." is centered in the white space between these bands.

In the beginning...

- Write and tweak the abstract
 - Have it write the abstract in my voice
- Have it write an outline, adjust it
- Talk about the fork
 - PowerPoint or ChatGPT
 - We'll come back to PowerPoint
- Have it make slides, it can't
- Have it write PowerShell to make slides
 - Fix the path
 - Fix the layout
 - Add speaker notes
 - Add pictures
- Do it in PowerPoint
 - Might have to paste the outline in in pieces
 - Add speaker notes by slide number

What is AI?

AI is many things

NLP - Natural Language Processing

ML - Machine Learning

CV – Computer Vision

It learns like humans do, for better or worse

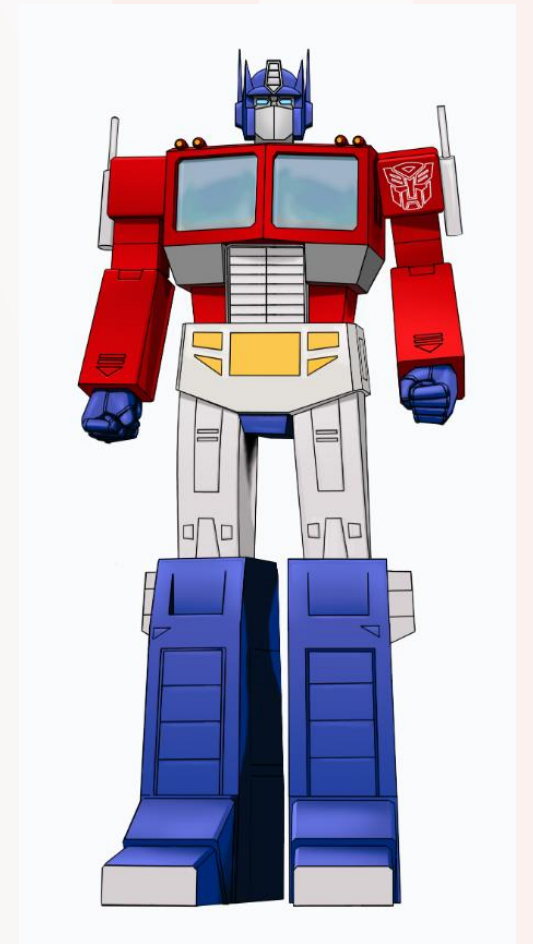
ChatGPT read the whole internet in December of 2023

Some Terms

- ◆ Neural Network – Like our brains
- ◆ Nodes – Like a neuron
- ◆ Parameter – Weights on connections
- ◆ Hallucinations – Stuff the AI imagined
- ◆ Temperature – Higher, more random, lower, more real
- ◆ Alignment – Are AI and humans' outcomes aligned?
- ◆ Large Language Model (LLM) – The AI's brain

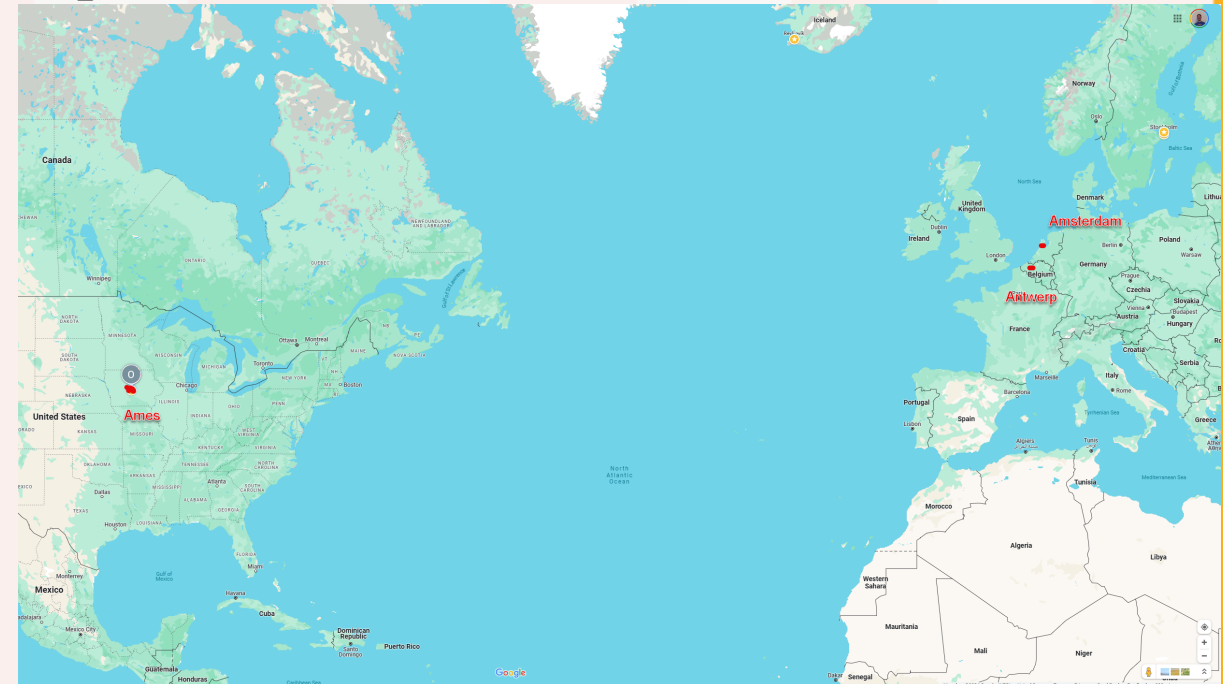
Why all the attention recently?

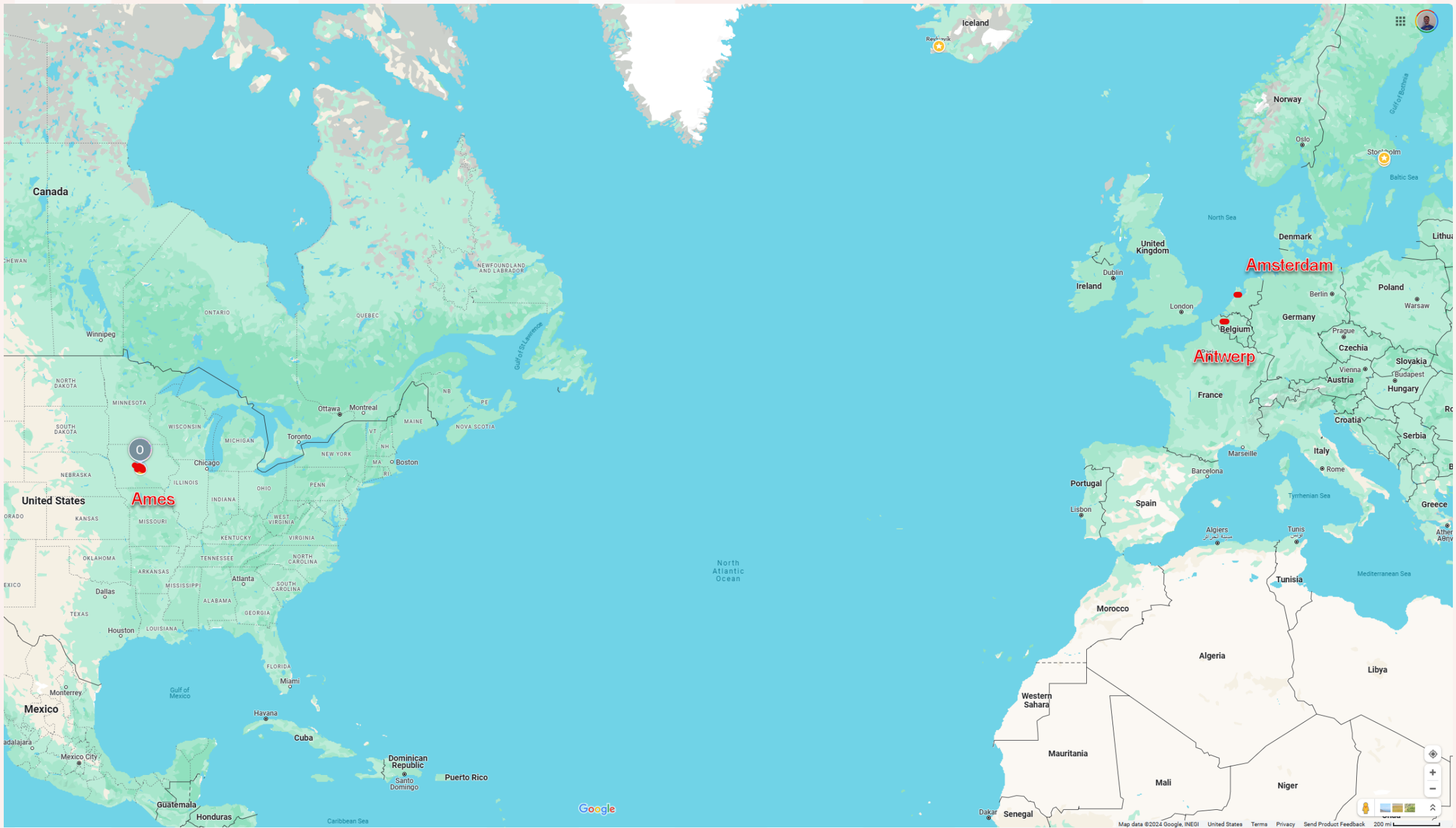
- ◆ Word vectors
- ◆ The introduction of Transformers
 - ◆ Attention is all you need
- ◆ Big data
- ◆ Big cloud processing
- ◆ Large Language Models
- ◆ Generative AI
- ◆ Multimodality



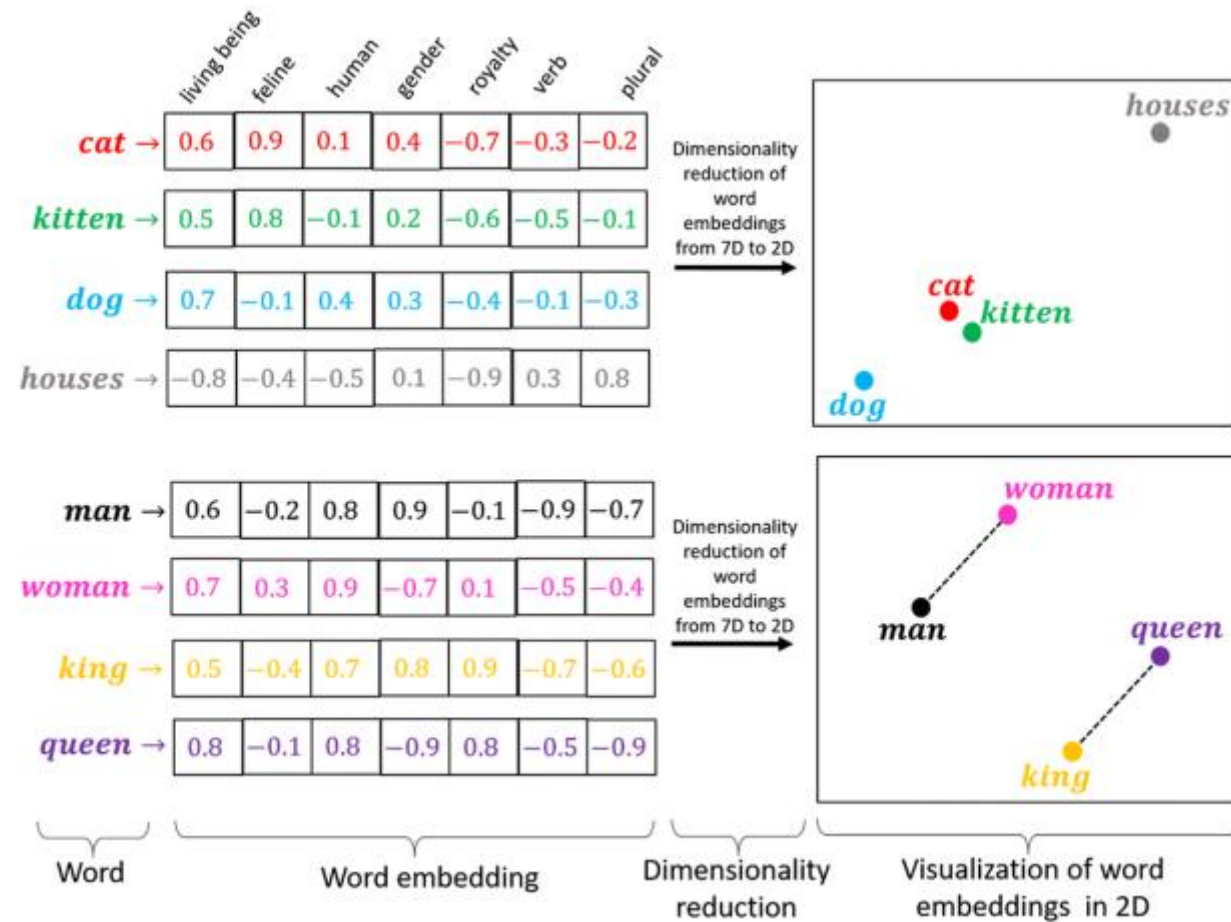
Word Vectors

- ◆ Representing words as numbers
- ◆ Ames [42°02'N 93°37'W]
- ◆ Amsterdam [52°22'N 04°53'E]
- ◆ Antwerp [51°13'N 04°24'E]
- ◆ 2 Dimensions





Word Vectors



The old way - Gobots

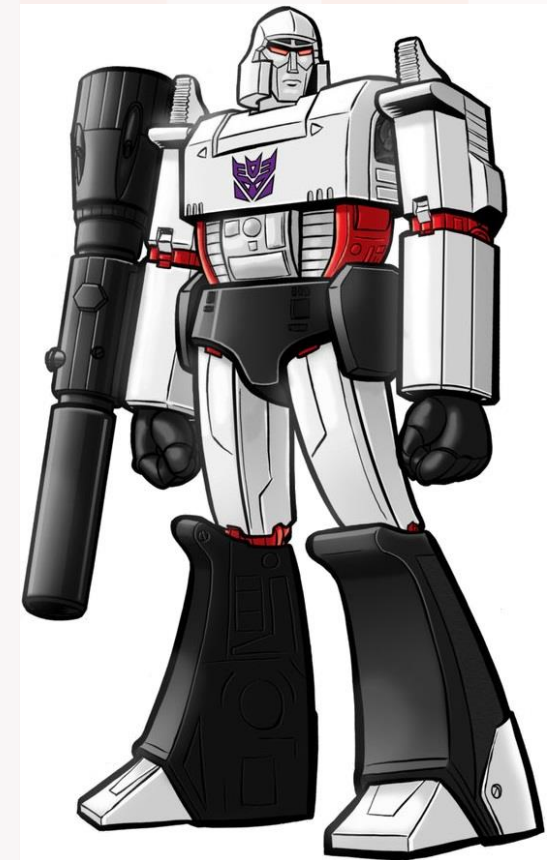
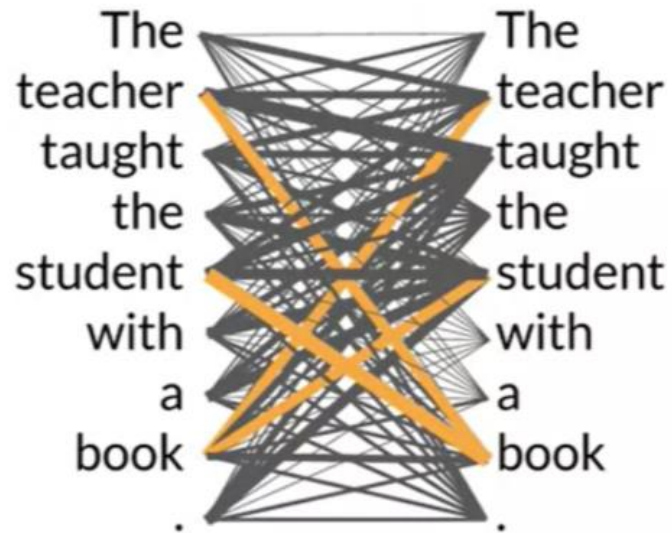


The teacher taught the student with the book.



The new, cool way - Transformers

- ◆ New, better way to encode and decode tokens and vectors



Generative AI

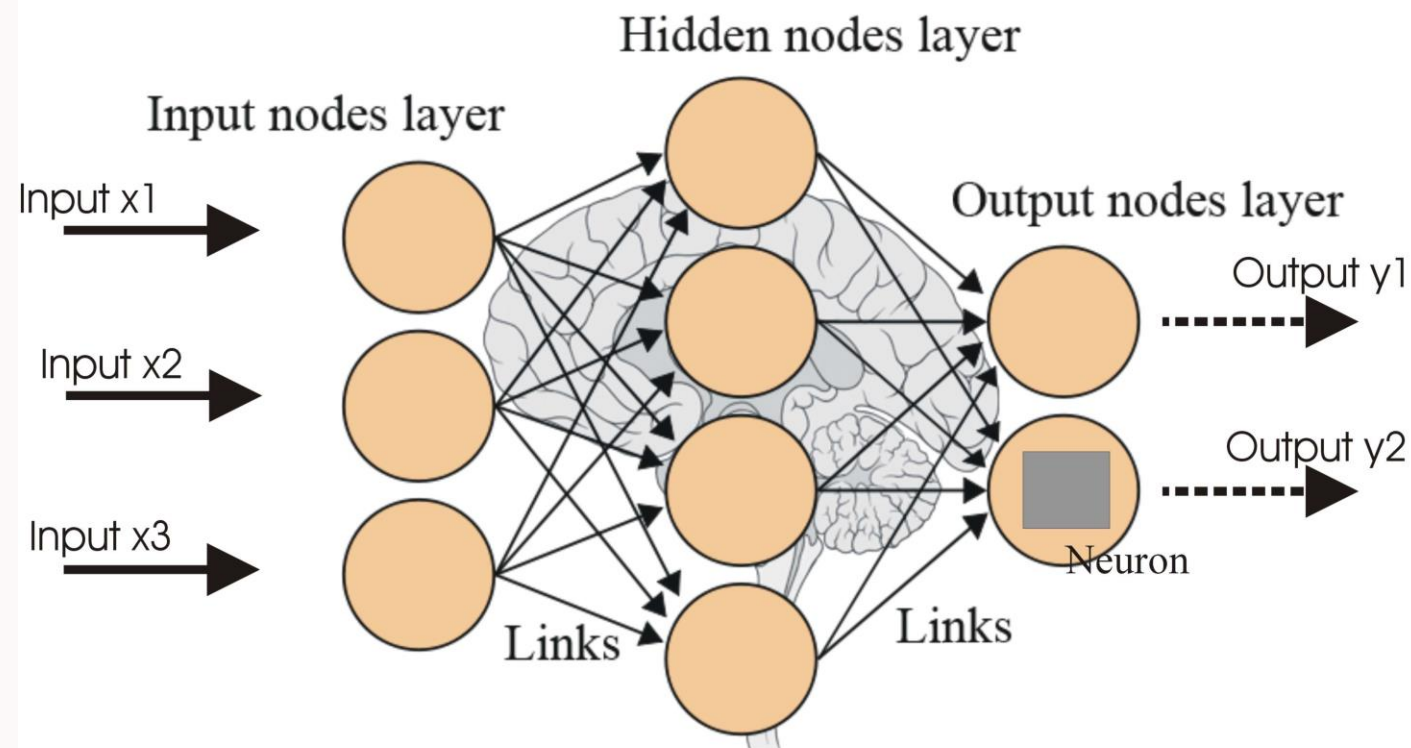
What the heck is a GPT, anyway?

Generative – AI that makes new stuff

Pre-Trained – The model was trained ahead of time

Transformer – A new way to input and output data

Neural Network



How?

- ◆ Don't think of it as a computer or software
- ◆ What role would you like it to play?
Review? Creator? Collaborator?
- ◆ Initiate (proact?) or react?
 - ◆ Tyranny of the blank page
 - ◆ "I want to..."
 - ◆ "What's the best way to..."
 - ◆ # Loop through \$ListItemList and..."
- ◆ Decide which AI tool to use

Prompting

Quick Prompt Tips

- Be specific, but not too specific
 - What happens if you ask for a bat?
 - How about football?
- Tell it what you want, not what you don't want
- Say how much you want
- Then ask for more



You and AI must develop a Love Language

- You have done this before
 - Learning to meet people in public
 - Learning to “Google”
 - Ordering food in a fancy restaurant
 - Parenting kids or pets
- You need to be the smartest person in the room with AI!



There is no perfect prompt

- Just like there was no perfect pickup line
- You will find go to prompts for different scenarios but those are just starts
- Always iterate
- Be polite and positive



There are no stupid questions

- Worst case it will say “No!”
- Ask it things that you “Know” it cannot do, see what happens.



Ask it about prompts



You

Please create me an image of a mostly white and black berne doodle who is sitting cutely in front of a Christmas tree. Make the image look like a real life photo.



ChatGPT



Here is the image of a mostly white and black Berne Doodle sitting cutely in front of a Christmas tree, created to resemble a real-life photograph.



You

Will you please share the prompt you sent to Dall-e with me?



ChatGPT

Certainly! Here's the prompt I used for DALL-E:

"A mostly white and black Berne Doodle dog sitting cutely in front of a decorated Christmas tree. The image should resemble a real-life photograph, capturing the fluffy texture of the dog's fur and the festive ambiance of the Christmas tree with its twinkling lights and ornaments."



Use AI to write better PowerShell

- ◆ Now that we're AI experts...
- ◆ How can we use this tool?
- ◆ Write better code (PowerShell!)
 - ◆ Faster
 - ◆ Fewer errors
 - ◆ More functionality
 - ◆ Better documentation
 - ◆ Write better *anything*

Some of my favorite Wow stories

- PTO Letters
- Checking math homework with a picture
- Cruise ship blood donor
- Soccer club A/B vs. two equal teams
- 20 Banks statements to 1 spreadsheet
- Customized learning

Examples

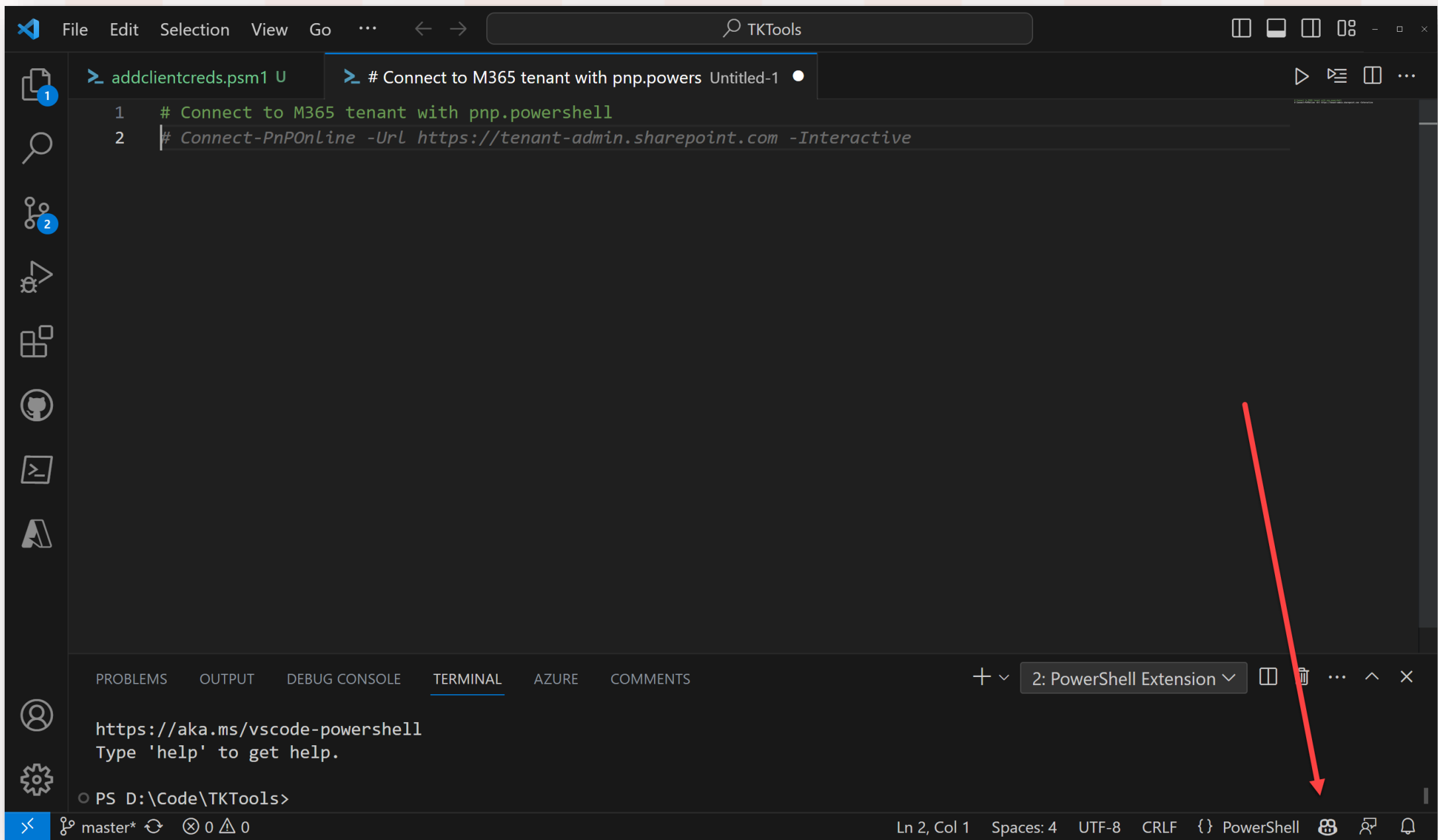
CoPilot

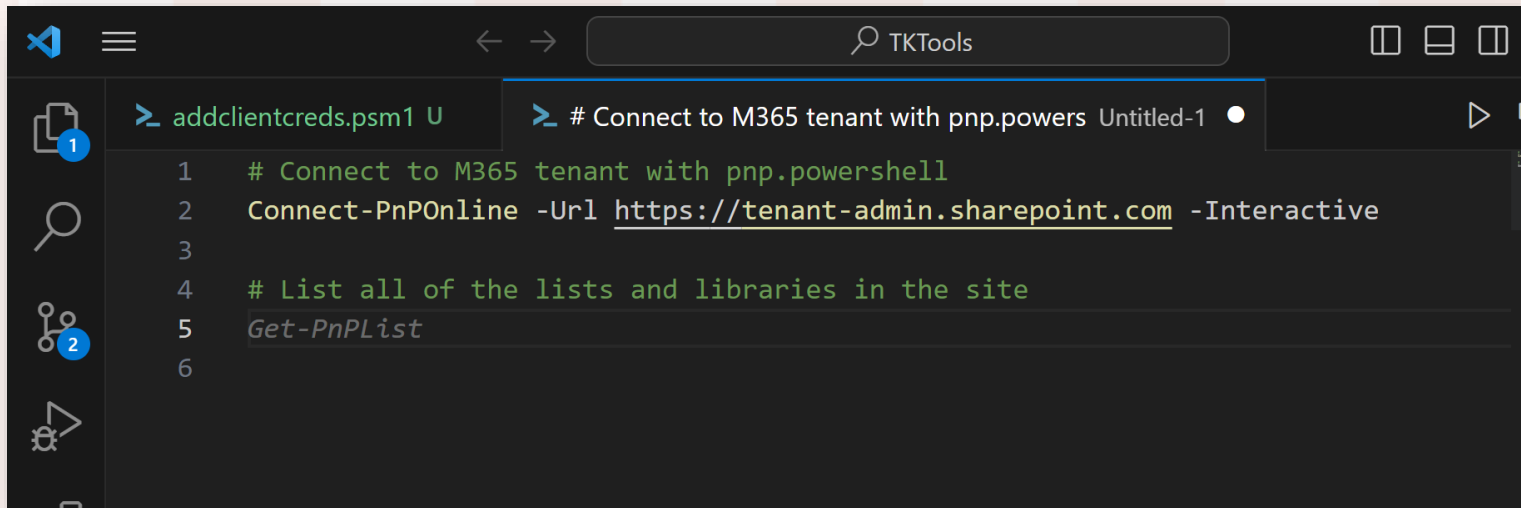
- ◆ GitHub Copilot
- ◆ Like pair programming
- ◆ Looks over your shoulder
- ◆ Uses its corpus, open tabs, and your code
- ◆ \$20 a month



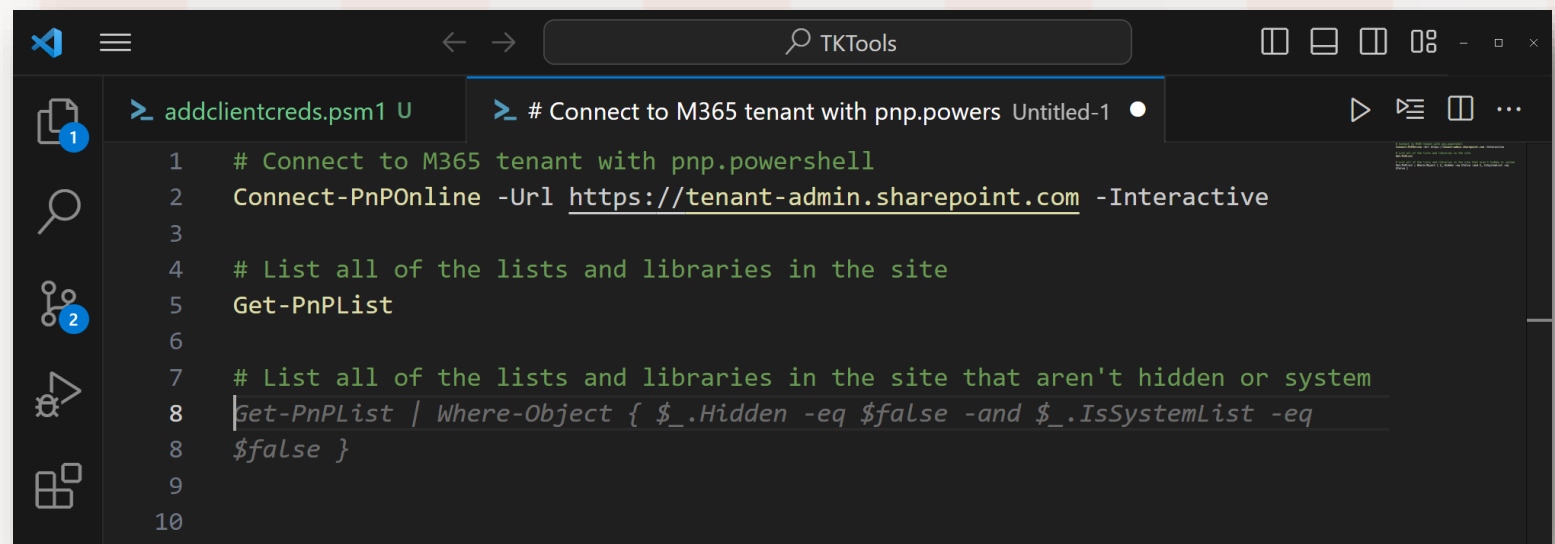
ChatGPT

- ◆ That genie in a bottle
- ◆ “Write me some PowerShell code that...”
- ◆ Compliments GitHub Copilot
- ◆ Spring for the \$20 a month

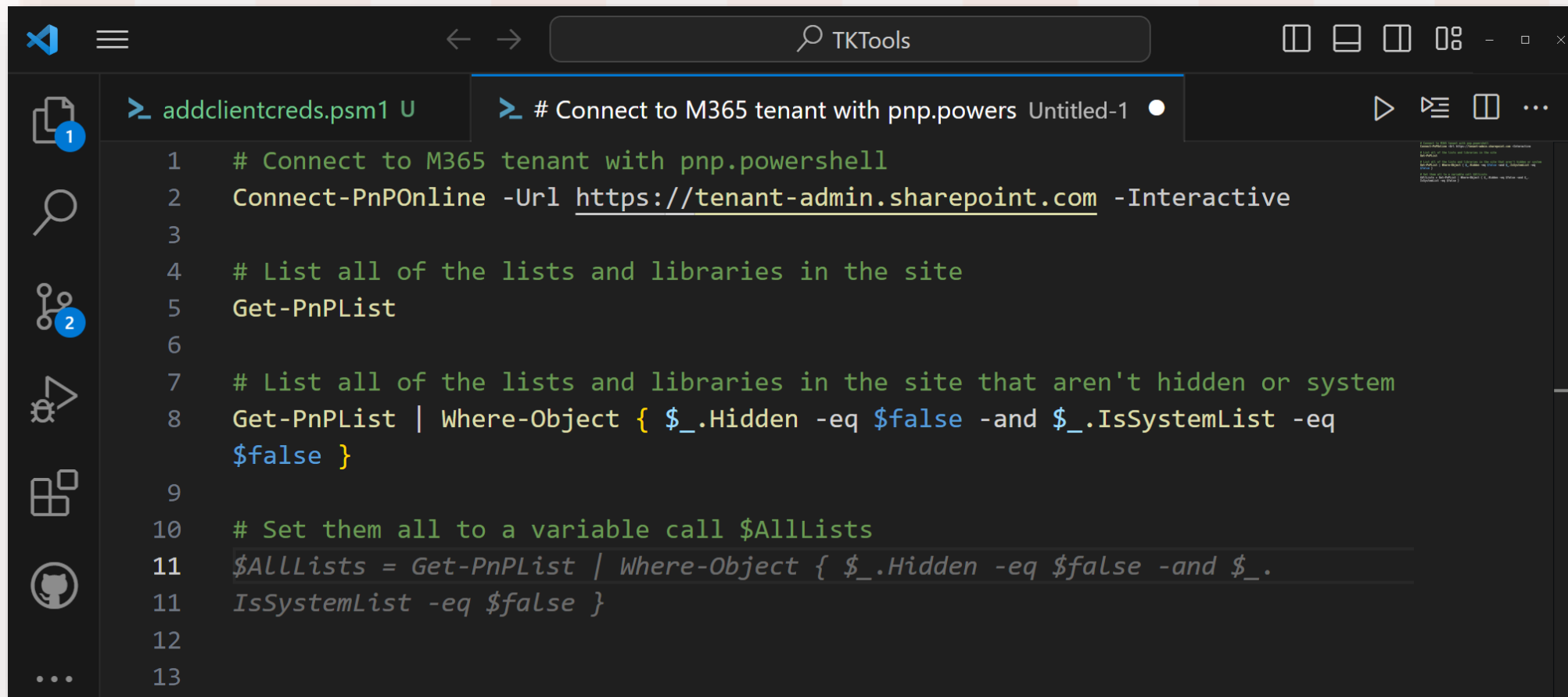




```
> addclientcreds.psm1 U # Connect to M365 tenant with pnp.powershell Untitled-1
1 # Connect to M365 tenant with pnp.powershell
2 Connect-PnPOnline -Url https://tenant-admin.sharepoint.com -Interactive
3
4 # List all of the lists and libraries in the site
5 Get-PnPList
6
```

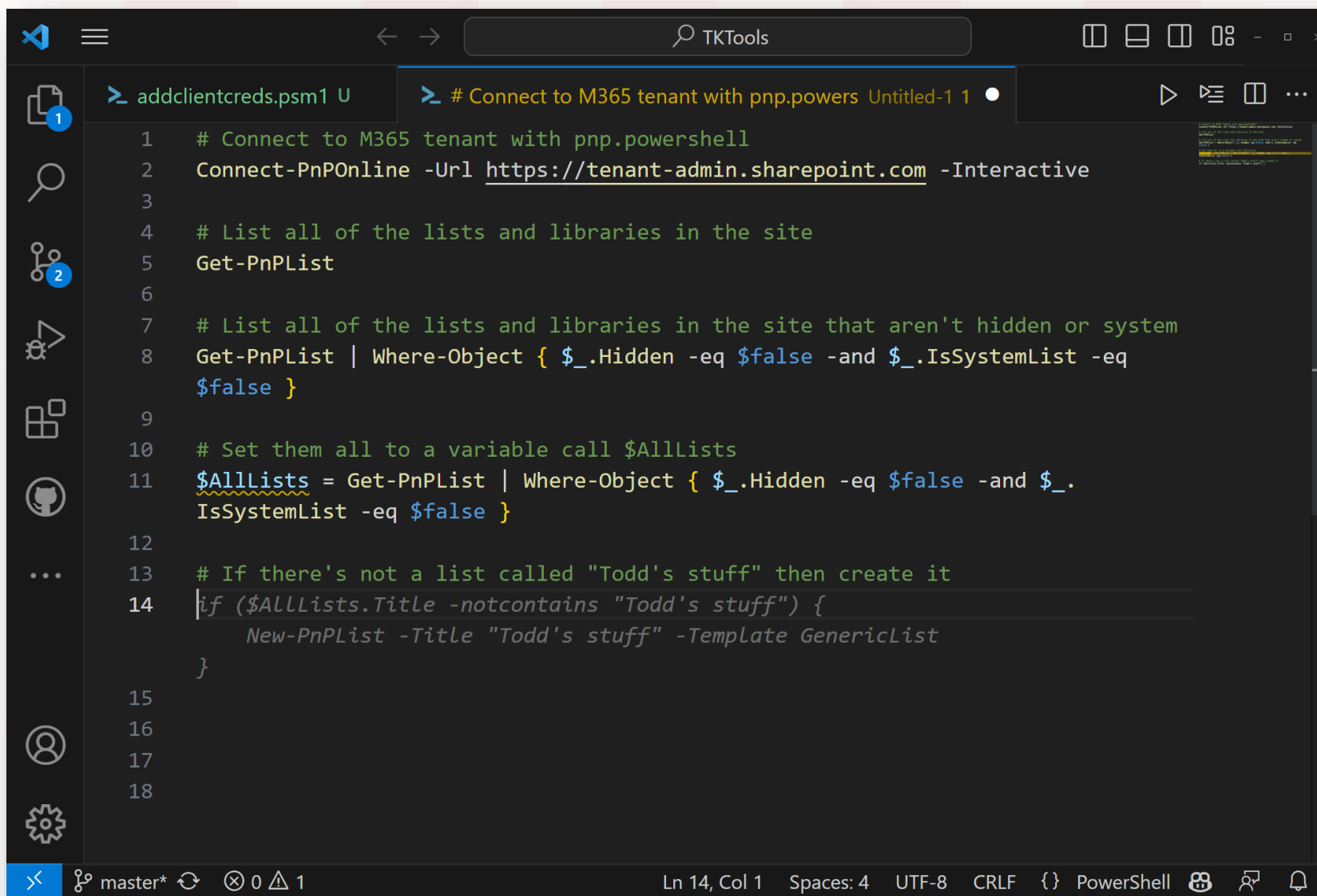


```
> addclientcreds.psm1 U # Connect to M365 tenant with pnp.powershell Untitled-1
1 # Connect to M365 tenant with pnp.powershell
2 Connect-PnPOnline -Url https://tenant-admin.sharepoint.com -Interactive
3
4 # List all of the lists and libraries in the site
5 Get-PnPList
6
7 # List all of the lists and libraries in the site that aren't hidden or system
8 Get-PnPList | Where-Object { $_.Hidden -eq $false -and $_.IsSystemList -eq
8 $false }
9
10
```



The image shows a Visual Studio Code editor window with a dark theme. The top bar includes the VS Code logo, a hamburger menu, navigation arrows, a search bar containing 'TKTools', and window management icons. The left sidebar contains icons for Explorer (with a '1' badge), Search, Source Control (with a '2' badge), Run and Debug, Extensions, and GitHub. The main editor area has two tabs: 'addclientcreds.psm1 U' and '# Connect to M365 tenant with pnp.powershell Untitled-1'. The active tab displays a PowerShell script with line numbers 1 through 13. The script connects to a SharePoint tenant and lists non-hidden, non-system lists. The script content is as follows:

```
1 # Connect to M365 tenant with pnp.powershell
2 Connect-PnPOnline -Url https://tenant-admin.sharepoint.com -Interactive
3
4 # List all of the lists and libraries in the site
5 Get-PnPList
6
7 # List all of the lists and libraries in the site that aren't hidden or system
8 Get-PnPList | Where-Object { $_.Hidden -eq $false -and $_.IsSystemList -eq
  $false }
9
10 # Set them all to a variable call $AllLists
11 $AllLists = Get-PnPList | Where-Object { $_.Hidden -eq $false -and $_.
11 IsSystemList -eq $false }
12
13
```



The image shows a Visual Studio Code editor window with a dark theme. The top bar includes the VS Code logo, a search bar with 'TKTools', and window management icons. The left sidebar contains icons for Explorer, Search, Source Control, Run and Debug, Extensions, GitHub, and a settings gear. The Explorer view shows two files: 'addclientcreds.psm1 U' and '# Connect to M365 tenant with pnp.powershell Untitled-1 1'. The main editor area displays a PowerShell script with 18 lines of code. The script connects to an M365 tenant, lists SharePoint lists, filters out hidden and system lists, and creates a new list if one with the title 'Todd's stuff' does not exist. The status bar at the bottom shows 'Ln 14, Col 1', 'Spaces: 4', 'UTF-8', 'CRLF', and 'PowerShell'.

```
1 # Connect to M365 tenant with pnp.powershell
2 Connect-PnPOnline -Url https://tenant-admin.sharepoint.com -Interactive
3
4 # List all of the lists and libraries in the site
5 Get-PnPList
6
7 # List all of the lists and libraries in the site that aren't hidden or system
8 Get-PnPList | Where-Object { $_.Hidden -eq $false -and $_.IsSystemList -eq
  $false }
9
10 # Set them all to a variable call $AllLists
11 $AllLists = Get-PnPList | Where-Object { $_.Hidden -eq $false -and $_.
  IsSystemList -eq $false }
12
13 # If there's not a list called "Todd's stuff" then create it
14 if ($AllLists.Title -notcontains "Todd's stuff") {
15     New-PnPList -Title "Todd's stuff" -Template GenericList
16 }
17
18
```

Resources

- ◆ [Alan Smith – Inside GPT - Room 7](#)
- ◆ [Shawn Wang on AI](#)
- ◆ [ChatGPT](#)
- ◆ [GitHub Copilot](#)
- ◆ [The 12 minute version of this with demos](#)
- ◆ [Why AI Will Save the World - Marc Andreessen](#)

Some AIs to check out

- Chatbots
 - ChatGPT
 - Google Gemini
 - Anthropic Claude
 - Bing Chat
 - M365 CoPilot
- Open Source LLMs
 - Llama 2
 - Mistral AI
 - Falcon
- PDF.ai
- Personal Productivity
 - Rewind AI
 - Mem.ai
 - Poised
- Images & Video
 - Midjourney
 - Wondercraft
 - Adobe Firefly
 - Headshot Pro
 - Pika
 - ElevenLabs
 - Synthesia

Questions?



todd.klindt@sympraxisconsulting.com
[@toddklindt](https://twitter.com/toddklindt)
www.toddklindt.com/techorama

