# ChatGPT: What's Going on in that Brain of Yours?



#### Justin Grammens – Founder + CEO





## Outline

- About Me
- What are Large Language Models
- Hands on with GPT-2 (as a model for GPT-3)
- Explore OpenAl Tools
  - Playground
  - API
  - Plugins (time permitting)



## About Me

- Founder, Lab651 & Recursive Awesome Custom Software and Al Solutions Development
- Co-founder, Captovation Al powered online presentation coaching platform
- Owner, Al Weekly News Publication covering Al
- Host of the "Conversations on Applied Al Podcast"
- Adjunct Professor, University of Saint Thomas –
  Teaching graduate courses on IoT & ML
- Co-founder, **Applied AI** 501(c)(3) non-profit: Monthly meetups, conferences, videos and podcasts on AI/ML





## Large Language Models

- Generative mathematical models of the statistical distribution of tokens in the vast public corpus of human-generated text.
- Sentence: "The first person to walk on the Moon was"
- Really asking: Given the statistical distribution of words in the vast public corpus of (English) text, what words are most likely to follow the sequence?
- Answer: Neil Armstrong



#### **GPT Releases**

- Version 1.0 June 2018
  - 117 million parameters
- Version 2.0 February 2019
  - 1.5 billion parameters
- Version 3.0 May 2020
  - 175 billion parameters
  - 100x larger than version 2.0
- Version 4.0 March 2023
  - 1+ trillion parameters
  - 6x larger than version 3.0





- Cloud & desktop hybrid, integrated computation platform
- Uses the Wolfram Language
- Built in algorithms, data and shared knowledge base
- Run computations locally or in the cloud
- Similar to Jupyter notebooks or Google's Colab environment



## Examples - OpenAl

- Docs Reference (Start here) -<u>https://platform.openai.com/docs/introduction</u>
- Examples <a href="https://platform.openai.com/examples">https://platform.openai.com/examples</a>
- API Reference <a href="https://platform.openai.com/docs/api-reference">https://platform.openai.com/docs/api-reference</a>
- Playground <a href="https://platform.openai.com/playground">https://platform.openai.com/playground</a>
- Open AI Cookbook <a href="https://github.com/openai/openai-cookbook">https://github.com/openai/openai-cookbook</a>



## Thank You

Justin Grammens Founder + CEO

justin@lab651.com

Please reach out. I would love to connect and discuss more!



QR Code to GitHub repo with the workbook and links to examples

