

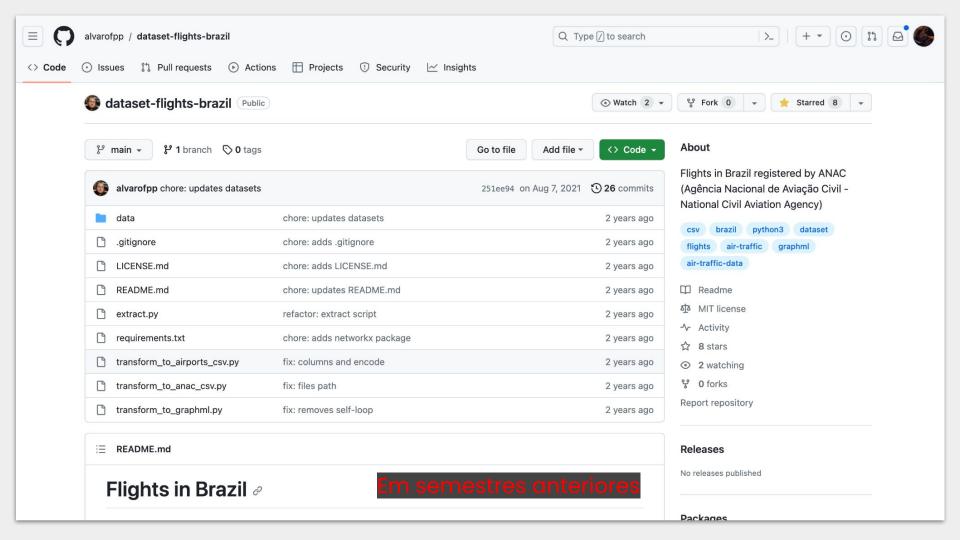
# Small Worlds

Project

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# Objetivos

Explorar os conteúdos das semanas 7 e 8.

- Assortatividade
- Distâncias\*
- Componentes conectados
- Coeficiente de clustering





- 👺 Newman, Mark. Networks
- Menczer, Filippo; Fortunato, Santo; Davis, Clayton A. A First Course in Network Science
- 🛎 Zinoviev, Dmitry. Complex Network Analysis in Python
- 🛎 Coscia, Michele. The Atlas for the Aspiring Network Scientist

Tool	Link
Wetwork	networkx.org
	graph-tool.skewed.de
Gephi	gephi.org
	github.com/gboeing/osmnx
ChatGPT	chat.openai.com
<b> </b> Dataset	snap.stanford.edu/data



#### Lessons 2

#### Week 01

- Legister PDF Course Outline: Provides an overview of the course structure and topics covered.
- - Your main goal for this week is to create a personal repository for tracking your progress and coursework.
  - Feel free to explore these resources and engage with the course material. If you have any questions or need assistance, please don't hesitate to reach out.
  - Happy coding!



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#### Stanford Large Network Dataset Collection

- Social networks: online social networks, edges represent interactions between people
- Networks with ground-truth communities: ground-truth network communities in social and information networks
- · Communication networks : email communication networks with edges representing communication
- Citation networks : nodes represent papers, edges represent citations
- · Collaboration networks: nodes represent scientists, edges represent collaborations (co-authoring a paper)
- Web graphs: nodes represent webpages and edges are hyperlinks
- Amazon networks: nodes represent products and edges link commonly co-purchased products
- Internet networks : nodes represent computers and edges communication
- Road networks: nodes represent intersections and edges roads connecting the intersections
- Autonomous systems: graphs of the internet
- Signed networks : networks with positive and negative edges (friend/foe, trust/distrust)
- Location-based online social networks : social networks with geographic check-ins
- · Wikipedia networks, articles, and metadata: talk, editing, voting, and article data from Wikipedia
- Temporal networks : networks where edges have timestamps
- Twitter and Memetracker: memetracker phrases, links and 467 million Tweets
- Online communities: data from online communities such as Reddit and Flickr
- Online reviews: data from online review systems such as BeerAdvocate and Amazon
- User actions: actions of users on social platforms.

Face to face communication not works a naturally of face to face (non anline) interactions

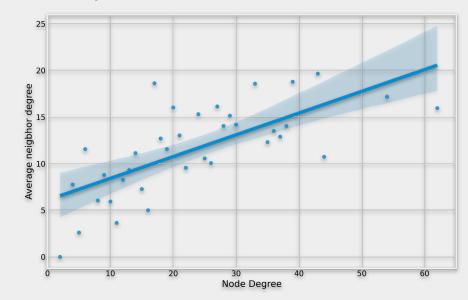
## Requisito 2:

Para cada uma das redes escolhidas, fazer um gráfico bipartido sobre a assortatividade em relação ao grau dos nós da rede. Faça as figuras em um layout de grid.

Como você interpreta os resultados comparando as diferentes

redes?

Gere um arquivo readme específico para essa análise, contando as figuras visualizadas no arquivo e sua interpretação. O texto da interpretação deverá ter entre 500 e 1000 palavras.



## Requisito 3:

Reproduzir a tabela abaixo para cada uma das redes escolhidas

Implementar a tabela no formato markdown juntamente com a interpretação dos resultados cuja o texto deverá ter entre 500 a 1000 palavras. A tabela e o texto deverá estar em um arquivo readme.



### Requisito 4:

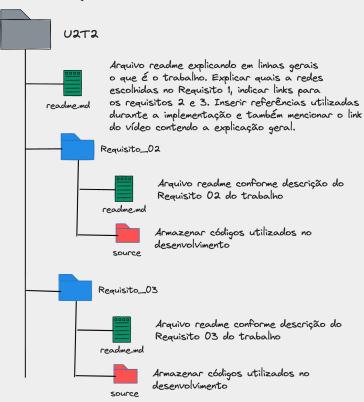
Grave um vídeo de até 5min explicando tudo o que foi desenvolvido assim como a explicação dos resultados e os principais achados com o trabalho.

O link do vídeo deverá estar no arquivo readme principal no repositório público do trabalho.



# Avaliação

O seu repositório do curso agithut



- +Trabalho Individual
- +2,00 (dois) pontos na Unidade 02
- + Submeter apenas o link do repositório do trabalho em questão
- + Organização!!!!!

October						November							
10			2023				11			2023			
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1	2	3	4	5	6	7				1	2	3	4
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15	16	17	18	19	20	21	12	13	14	15	16	17	18
22	23	24	25	26	27	28	19	20	21	22	23	24	25
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