

Pandas Workshop

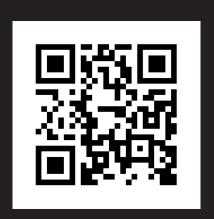
Computer Science Club



Go straight to our FB Events page!



EM 110 - Duck Lounge Engineering Maths Building



Check us out!



Kaurna Acknowledgement

We acknowledge and pay our respects to the Kaurna people, the traditional custodians whose ancestral lands we gather on. We acknowledge the deep feelings of attachment and relationship of the Kaurna people to country and we respect and value their past, present and ongoing connection to the land and cultural beliefs.

What is Pandas

Pandas is an open-source Python library that provides high-performance, easy-to-use data structures and data analysis tools.

It is built on python and numpy so supports most python and numpy features and supports most standard features of the library.



Brief Introduction to Data Science

But behind every beautiful visualisation there is messy raw data that needs to be cleaned

2	2009 IA	AMES	5-Jun	156	42.02	-93.77	14.92	0	0 NA		27	17	6	36.67	28.9
3	2009 IA	AMES	12-Jun	163	42.02	-93.77	15.01	0	0 NA		26	18	8	36.11	24.4
4	2009 IA	AMES	19-Jun	170	42.02	-93.77	15.06	0	0 NA		32	22	12	66.11	5.8
5	2009 IA	AMES	26-Jun	177	42.02	-93.77	15.06	0	0 NA		34	26	18	91.67	24.2
6	2009 IA	AMES	3-Jul	184	42.02	-93.77	15.00	0	0	3	28	20	13	55.00	21.9
7	2009 IA	AMES	10-Jul	191	42.02	-93.77	14.90	0	0	2	29	22	13	63.89	22.7
8	2009 IA	AMES	17-Jul	198	42.02	-93.77	14.75	0	0	2	27	19	11	50.56	2
9	2009 IA	AMES	24-Jul	205	42.02	-93.77	14.56	2	0	2	30	20	11	52.78	7.9
10	2009 IA	AMES	31-Jul	212	42.02	-93.77	14.34	19	0	2	29	19	10	47.22	5.2
11	2009 IA	AMES	7-Aug	219	42.02	-93.77	14.09	29	0	1	33	22	10	65.00	24.7
12	2009 IA	AMES	14-Aug	226	42.02	-93.77	13.81	138	0 NA		31	23	16	79.44	15.7
13	2009 IA	AMES	28-Aug	240	42.02	-93.77	13.22	91	0	3	27	19	8	43.33	31.5
14	2009 IA	AMES	4-Sep	247	42.02	-93.77	12.91	3	0 NA		26	15	5	17.78	0.3
15	2009 IA	AMES	11-Sep	254	42.02	-93.77	12.59	15	1 NA		27	19	9	46.11	1.3
16	2009 IA	AMES	18-Sep	261	42.02	-93.77	12.26	1115	0 NA		28	18	7	40.56	(
17	2009 IA	MCNAY	5-Jun	156	40.97	-93.42	14.81	0	0 NA		26	18	10	31.11	36.6
18	2009 IA	MCNAY	12-Jun	163	40.97	-93.42	14.90	0	0 NA		25	20	15	20.56	9.7
19	2009 IA	MCNAY	19-Jun	170	40.97	-93.42	14.95	0	0 NA		31	21	12	39.44	5.4
20	2009 IA	MCNAY	26-Jun	177	40.97	-93.42	14.94	0	0 NA		36	27	20	104.44	14.9
21	2009 IA	MCNAY	3-Jul	184	40.97	-93.42	14.89	0	0 NA		30	22	16	65.00	29
22	2009 IA	MCNAY	10-Jul	191	40.97	-93.42	14.79	0	0 NA		30	24	15	76.67	18
23	2009 IA	MCNAY	17-Jul	198	40.97	-93.42	14.65	0	0 NA		28	21	12	62.78	7.1
24	2009 IA	MCNAY	24-Jul	205	40.97	-93.42	14.46	0	0	1	32	22	14	64.44	5.7
25	2009 IA	MCNAY	31-Jul	212	40.97	-93.42	14.25	3	0	1	31	22	13	67.22	0.6

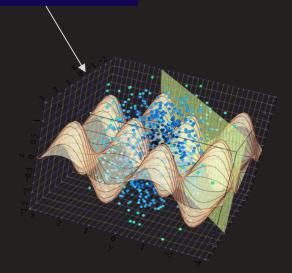
Why Pandas?

2	2009 IA	AMES	5-Jun	156	42.02	-93.77	14.92	0	0 NA		27	17	6	36.67	28.9
3	2009 IA	AMES	12-Jun	163	42.02	-93.77	15.01	0	0 NA		26	18	8	36.11	24.4
4	2009 IA	AMES	19-Jun	170	42.02	-93.77	15.06	0	0 NA		32	22	12	66.11	5.8
5	2009 IA	AMES	26-Jun	177	42.02	-93.77	15.06	0	0 NA		34	26	18	91.67	24.2
6	2009 IA	AMES	3-Jul	184	42.02	-93.77	15.00	0	0	3	28	20	13	55.00	21.9
7	2009 IA	AMES	10-Jul	191	42.02	-93.77	14.90	0	0	2	29	22	13	63.89	22.7
8	2009 IA	AMES	17-Jul	198	42.02	-93.77	14.75	0	0	2	27	19	11	50.56	2
9	2009 IA	AMES	24-Jul	205	42.02	-93.77	14.56	2	0	2	30	20	11	52.78	7.9
10	2009 IA	AMES	31-Jul	212	42.02	-93.77	14.34	19	0	2	29	19	10	47.22	5.2
11	2009 IA	AMES	7-Aug	219	42.02	-93.77	14.09	29	0	1	33	22	10	65.00	24.7
12	2009 IA	AMES	14-Aug	226	42.02	-93.77	13.81	138	0 NA		31	23	16	79.44	15.7
13	2009 IA	AMES	28-Aug	240	42.02	-93.77	13.22	91	0	3	27	19	8	43.33	31.5
14	2009 IA	AMES	4-Sep	247	42.02	-93.77	12.91	3	0 NA		26	15	5	17.78	0.3
15	2009 IA	AMES	11-Sep	254	42.02	-93.77	12.59	15	1 NA		27	19	9	46.11	1.3
16	2009 IA	AMES	18-Sep	261	42.02	-93.77	12.26	1115	0 NA		28	18	7	40.56	0
17	2009 IA	MCNAY	5-Jun	156	40.97	-93.42	14.81	0	0 NA		26	18	10	31.11	36.6
18	2009 IA	MCNAY	12-Jun	163	40.97	-93.42	14.90	0	0 NA		25	20	15	20.56	9.7
19	2009 IA	MCNAY	19-Jun	170	40.97	-93.42	14.95	0	0 NA		31	21	12	39.44	5.4
20	2009 IA	MCNAY	26-Jun	177	40.97	-93.42	14.94	0	0 NA		36	27	20	104.44	14.9
21	2009 IA	MCNAY	3-Jul	184	40.97	-93.42	14.89	0	0 NA		30	22	16	65.00	29
22	2009 IA	MCNAY	10-Jul	191	40.97	-93.42	14.79	0	0 NA		30	24	15	76.67	18
23	2009 IA	MCNAY	17-Jul	198	40.97	-93.42	14.65	0	0 NA		28	21	12	62.78	7.1
24	2009 IA	MCNAY	24-Jul	205	40.97	-93.42	14.46	0	0	1	32	22	14	64.44	5.7
25	2009 IA	MCNAY	31-Jul	212	40.97	-93.42	14.25	3	0	1	31	22	13	67.22	0.6



Pandas helps turn messy data from unusable to great visualisations and Prediction models.

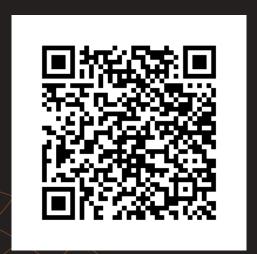
*pandas doesn't directly create the visualisations



Invite to Notebook

For this demo we will be using Google Collab(a virtual python environment). The QR code bellow will lead you to the notebook that we will be using for the workshop.

https://colab.research.google.com/github/compsci-adl/pandas-workshop/blob/main/workshop.ipynb



Check discord announcement made prior

Check CS-club github for link

Conclusions

This workshop was just a basic overview of the most common functions.

If you are interested in learning more about learning about data science or machine learning:

Pandas / numpy / numpy / math math concepts / numpy / sklearn Tensorflow / opency

Please give us some feedback on our event! We would really appreciate it!



