2021 Fall; Python Programming for Data Science

Projects

Students within a group will develop a problem that they would like to work on. After "project proposal presentations" the instructor will schedule and meet with groups whose proposals are either overly or insufficiently complex.

The proposal and final project will be graded based on:

- Demonstrated understanding of Python concepts learned in the class;
- Demonstrated understanding of the final project problem;
- Quality of the code;
- Quality of documentation: one report of maximum 4 pages;
- Figures, tables, etc. can go to the appendix of the report;
- The report is mandatory for the final project only;
- Quality of the presentation: clarity of the exposition, slides quality, and duration (the groups should respect the time slot, 5 minutes with extra 1-2 minutes for questions);

Important Dates:

Project Proposals

- Project Proposals will be held on Monday 2020-10-26 at 7:00PM
- Students to submit their proposal presentations in pdf (only) by Monday 2020-10-26, time 1:00PM ET

Final Projects

- Final Projects Presentations will be held on Monday 2020-12-07 at 7:00PM
- The students to submit their final projects material by Monday 2020-12-07, time 1:00PM ET

Instructions

- On where and how to upload the material will be announced accordingly.

Some Projects Examples:

- Tools and mathematical models for data science;

- Visualization;

- Processing and/or statistics of large data sets;

- Social Network Analysis;

- Twitter analysis;

- Historical representations, trends, statistics, etc. of the processes such as: spread of epidemics, stock prices, road/train delays, product adoption, etc.

- Importantly no one here is asking nor suggesting to do forecasting, i.e. the future prediction of the suggested examples.

- New solutions or improvement of some of your previous projects by using the tools learned in our course;

- etc.

Groups and Students

The students in the class will form groups of 5 students on their own.

Group 01

1 Fan Zhang fz2068
1 Congyun Jin cj2164
1 Siyu Shen ss14359
1 Yi Wen yw5280
1 Zhuoyuan Xu zx1137

Group 02

2 Wenjie Shao ws2237
2 Xi Yang xy2122
2 Yuhan Liu yl7576
2 Jie Gu jg6617
2 Tiantian Zhang tz921

Group 03

3 Sara Okun sjo302
3 Pedro Galarza ppg228
3 Preston Lee Harris plh8393
3 Keshav Pant kp2749
3 David May dmm9812

Group 04

4 Peixin Zhou pz764
4 Wenpeng Zhao wz2144
4 Yuexi Wu yw4198
4 Yuhao Ge yg2154
4 Yuetong Zhou yz6729

Group 05

5 Amir Malek am6370
5 Ted Xie tx607
5 Faizan Kanji fnk9850
5 Elliot Dang yd1008
5 Andrew Gruber arg9444

Group 06

6 Harshitha Palegar hp2233
6 Selina He sh4337
6 Stanley Sukanto ss14358
6 Harlan Hutton ahh303
6 Benjamin Berkman bjb433

Group 07

7 Rahul Petkar rsp431
7 Farris Atif fda239
7 Adhham Zaatri arz8448
7 Ishan Khanka ik1304
7 Sagar Patel skp327

Group 08

8 Ozde Ozkaya oo568
8 Jin Liu jl7767
8 Elisa Wirsching emw528
8 Carolina Torreblanca ctb370
8 Vogel Zachary zjv207

Group 09

9 Jingxin Zhou jz4031
9 Yuyue Hua yh3061
9 Xuechun Shen xs1065
9 Jenna Kay Eubank jke261
9 Emma Marie Muhleman emm10005

Group 10

10 Yuqi Wei yw5260
10 Yang Gao yg2410
10 Tianpei Xiao tx559
10 Prerana Hiriyur ph2206
10 Peilin Zhen pz595

Group 11

11 Renzhi Lin rl3847
11 Hao Gao hg1587
11 Yash Jajoo yj1499
11 Jiaoyu Guo jg6254
11 Jiawei Fu jf3739

Group 12

12 Shengjie Ma sm8807
12 Ruoxiao Yu ry796
12 Jiahui Wang jw6273
12 Daniel Tang cht307
12 Cheng Zeng cz1951

Group 13

13 Evaristus Ezekwem ece278
13 Yashowardhan Gupta yg1057
13 Karmen Hutchinson kah771
13 Jonathan Lu jxl219
13 Zafir Monin zm2114

Group 14

14 Mathur, Anshu am10263
14 Singh, Akhand Pratap aps646
14 Shah, Aashvi avs476
14 Daswani, Mayank md4570
14 Wang, Zechen zw2746