#### Georgia Tech

CREATING THE NEXT

CSE 6040/x Overall Course and Data Analysis in Python Bootcamp Introductions

Overview – 1<sup>st</sup> Session

# Agenda

- Course Introduction Professor Richard Vuduc
- TA Introductions
- Introduction of Data Analysis in Python Bootcamp Series



# **TA Introductions**

- Chris Kinkade Head Instructor
- Mengmeng Lui Adjust Instructor, MSA section
- Jen Sherwood Head TA
- Albert Waldron Head Technical TA
- Bootcamp TAs
  - Christopher Carbonaro
  - Katie Nelson
  - Larry Heckel
  - Nawida Hussaini
  - Guest TAs, per topic



### Purpose of the Data Analysis in Python Bootcamp

- Introduce and demonstrate Python data analysis techniques, approaches, and methodologies to help the students pass the course exams.
- Some of the steps are specific to this class and its tools, but they can be generalized to other scenarios and toolsets.
- The Bootcamp is NOT to help with specific homework notebook problems. Piazza and the Notebook Office Hours sessions (on Thursdays) are for that.



#### **Purpose of the Bootcamp**

- The Bootcamp is intended for students who may not have a rigorous programming background.
- The Bootcamp covers topics that are helpful for the students in passing (and doing well) on the exams, and that are not part of the formal class materials.
- All Bootcamp sessions and materials are OPTIONAL, at each student's discretion. There is no requirement to attend any sessions or watch any of the posted videos.



# Should I Attend the Bootcamp?

- Each student must decide for themselves whether attending the Bootcamp would be helpful for them.
- We have provided self assessment notebooks at the beginning of Modules 0 and 1, to help the students with this decision.
- The self assessment notebooks are OPTIONAL and are NOT GRADED.



# Should I Attend the Bootcamp? – 2

- Bootcamp Attendance Decision for each student steps.
  - 1. Review the Self Assessment page on Canvas/edX.
  - Work through the Self Assessment notebook on Google Colab, adhering to the time restriction specified.
  - 3. Was I able to successfully complete the notebook in the recommended time?
    - YES I probably do not need to attend the Bootcamp.
    - NO -- I should consider attending the Bootcamp and/or viewing the Bootcamp materials.



- There will be two Bootcamps during the course, one each in Module 0 and Module 1.
- Bootcamp schedules and session topics are on Canvas and the Course Calendar.
- Zoom link for all Bootcamp sessions is posted in the O/MSA Piazza post, for the Bootcamp. The live Bootcamp sessions are only available for the O/MSA students.



- Additional materials from any live session, that are created during the session and not posted in advance on Canvas/edX, will be posted in the Bootcamp Piazza post.
- Any required announcements will be posted in the Bootcamp pinned Piazza post (both OMSA and VMM).



- All Bootcamp sessions will be recorded, with the videos posted on Piazza, for students who are not able to attend the live sessions. The recordings will be posted in both O/MSA and VMM Piazzas.
  - The video for each session will be posted within 24 hours of the session end.
  - For VMM, we must ensure that all personally-identifiable information (FERPA) has been removed or obscured, so posting there may take an extra day.



- Module 0 Live Session Content
  - Theory, code syntax, and Data Analysis programming in Python.
  - Code application and putting the concepts/syntax together for solutions on the exam exercises.
  - Techniques for troubleshooting exercises on the exam.
  - TA Walkthroughs of prior semester exams, illustrating thought processes and solutions of exam exercises.



- Module 1 Live Session Content
  - Theory, code syntax, and Data Analysis programming using Pandas, NumPy, and SQL in Python.
  - Code application and putting the concepts/syntax together for solutions on the exam exercises.
  - Techniques for troubleshooting exercises on the exam.
  - TA Walkthroughs of prior semester exams, illustrating thought processes and solutions of exam exercises.

 Bottom line, all these sessions are designed to help the students to pass (and do well on) the exams.

#### **Bootcamp Resources**

- Videos
  - Posted on Canvas/edX/Piazza
  - Current and prior semester Bootcamp content.
- Bootcamp GitHub -- Public repositories
  - <u>https://github.com/gt-cse-6040</u>
  - Contains working and final versions of all Bootcamp materials.
  - Students are welcome to access the repository in read only mode.
- Colab NBs
  - Part of GitHub site.
  - Class-developed content, not for grading.

