

2020 Fall: Programming Language for Data Analytics

Pilsung Kang
School of Industrial Management Engineering
Korea University

Course Description

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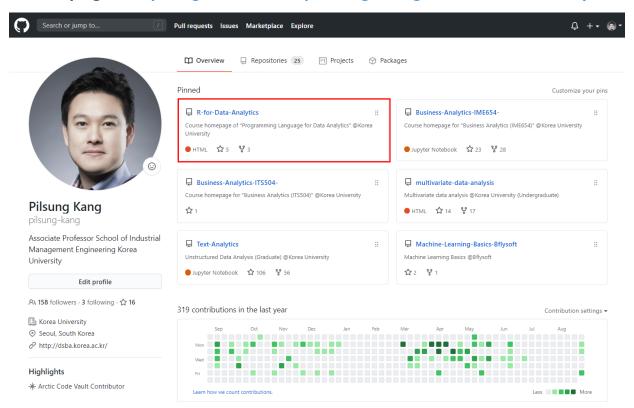
- ✓ This course provides a fundamental set of programming language (R) for analyzing various types of data. Students will learn
 - The basic syntax of R language
 - How to handle different data types in R
 - How to visualize the data and ways of documentation
 - How to collect data from the Web

Note

- √ This course is originally designed to students who are in the first year at School of Industrial Management Engineering
- ✓ Student who are in their second, third, or fourth year can enroll this course, but their highest grade will be limited to A (A+ will not be given)

Lecturer & Course Homepage

- Pilsung Kang
 - √ Associate professor at School of Industrial Management Engineering, Korea University
 - √ E-mail: pilsung_kang@korea.ac.kr
 - ✓ Course homepage: https://github.com/pilsung-kang/R-for-Data-Analytics



Lecturer & Course Homepage

R-for-Data-Analytics

Course homepage of "Programming Language for Data Analytics" @Korea University

Syllabus

Download

Final Scores

TBA

Assignments

- Assignment 1
 - o Due date: TBA
 - R file with your answer must be submitted via e-mail: dsba.koreauniv@gmail.com
 - o Title format: Assignment number, student id, and name
 - o Example: R1_202012345_홍길동

Schedule

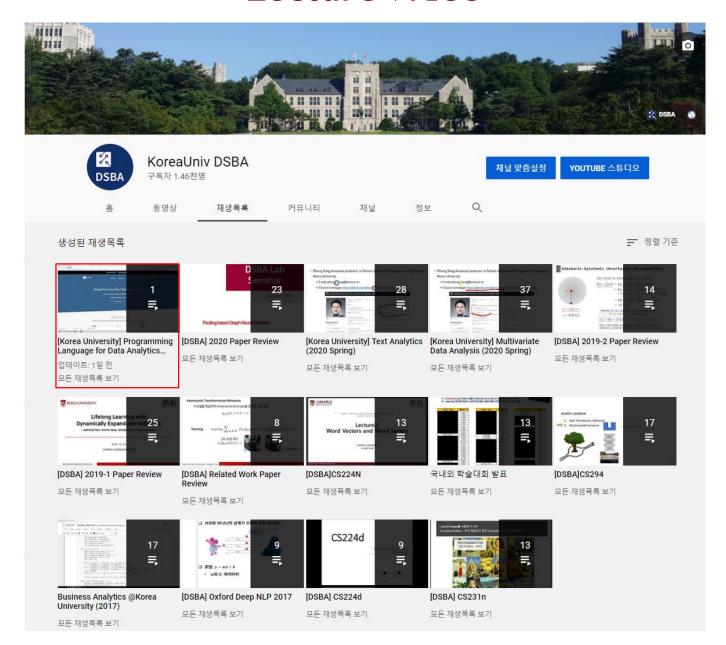
Data Analytics (Video, Slide)

- What is data analytics?
- What can we do with data analytics?
- Data analytics language: R & Python

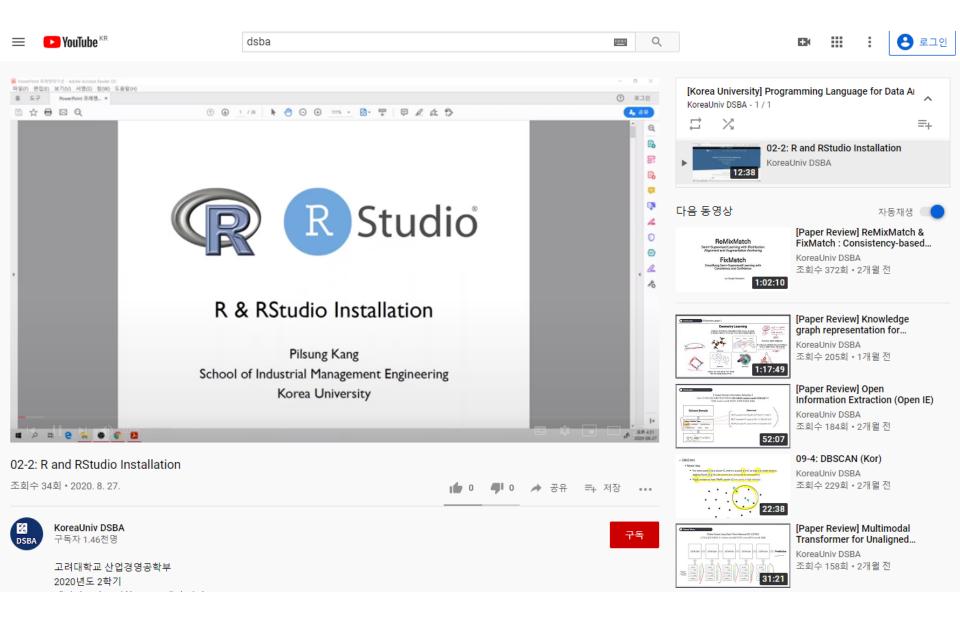
Lecture Video

- DSBA Lab Youtube Channel
 - ✓ https://www.youtube.com/channel/UCPq01cgCcEwhXI7BvcwIQyg
- Playlist for this course
 - √ https://www.youtube.com/channel/UCPq01cgCcEwhXI7BvcwIQyg/playlists?view_as=s
 ubscriber

Lecture Video

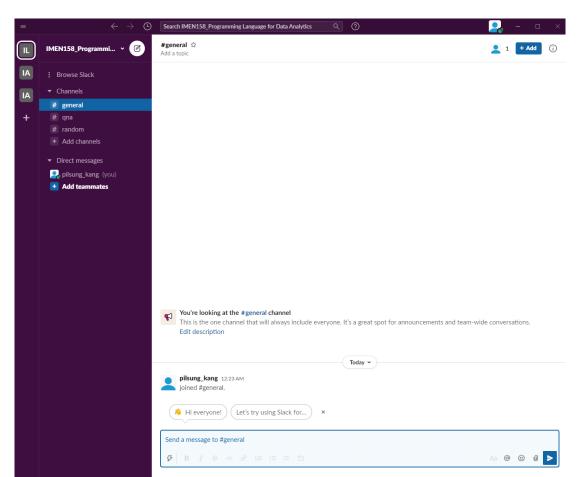


Lecture Video



Communication Channel

- Slack will be used for real-time communication channel
 - ✓ imen I 58-koreauniv.slack.com
 - ✓ The invitation link will be sent to the enrolled students via e-mail



Lecture Modules & Self-Introduction

Textbook

✓ All necessary materials (lecture slides, R scripts, datasets) are provided through the course homepage.

Introduce Yourself

- ✓ Submit your self-introduction slide (max. 5 pages) to the lecturer via E-mail (due date: 2020-09-11)
- ✓ Required information: Name, department, e-mail, cell phone number, recent photo(s)

Assessment

✓ 5 assignments (20% each)

Schedule

Week	Topics
1	Orientation
2	R and RStudio Installation, Data Types and Strings 1
3	Data Types and Strings 2
4	Data Types and Strings 3
5	No Class (Holiday)
6	Conditions, Loops, and Functions 1
7	Conditions, Loops, and Functions 2
8	No Class (Midterm exam period)
9	R graphics 1
10	R graphics 2
11	Documentation
12	Data Collection from the Web 1
13	Data Collection from the Web 2
14	Data Collection from the Web 3
15	Data Manipulation 1
16	Data Manipulation 2