Information Visualization (CSC464/ CSC664 LSUS summer online course)

Systems administrators, biomedical researchers, banks, fraud and [cyber]security investigators as well as other entities possess vast quantities of high-dimensional data (a.k.a., big data), which hide fundamental relations that need to be exploited to their advantage. This explains the demand for big data analysts, which is at an all-time high!*

The ability to view and explore graphical representations of such data and being able to say 'Ah Ha! That is interesting!' is the focus of Information Visualization.

The focus of this hands-on online course is examining the issues covering a wide range of visual displays, from classic to novel. Students will learn about visualizations and visualization packages (such as Tableau, 3D.js, Circos, Google Charts, etc.) and how to apply them to various data.

Understanding the principles of Information Visualization will enable students to evaluate existing and create new visualizations and visualization systems, with the goal of effectively analyzing the data from various sources.

Upon completion of this course, the students will have sufficient knowledge to prove their technical skills with a Tableau Specialist Exam and will be on their way towards passing the Tableau Certified Associate Exam, the leading data visualization tool in business intelligence and data visualization software industry.

How many students could you accommodate

How will this be delivered - what requirements would there be for students to participate

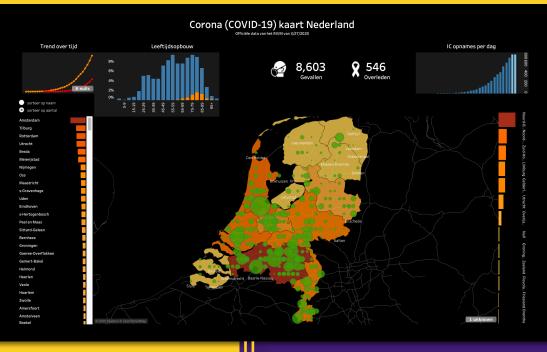
- Priority will be given to
 - o graduate students
 - o students who will be seniors and juniors during the Fall 2020 semester
 - o students with knowledge of
 - programing
 - statistics
 - Linux or command-line
- Students need Internet access and a computer with the following minimum specifications to run:
 - o Mac
 - iMac/MacBook computers 2009 or newer
 - macOS High Sierra 10.13, macOS Mojave 10.14 and macOS Catalina 10.15
 - 1.5 GB minimum free disk space
 - o Windows
 - Microsoft Windows 7 or newer (x64)
 - Microsoft Server 2008 R2 or newer
 - 2 GB memory
 - 1.5 GB minimum free disk space

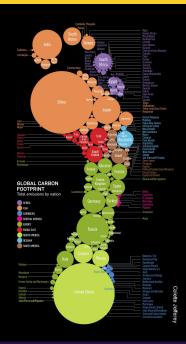
Projected start would be June 8 (with students application and selection done before then)

The summer online course at LSUS runs from June 1 to July 31, 2020. If students join after the semester begins they will have a bit extra work the first week of participation.

Students certificates - would you be able to "grade" them and determine if they are successful (and how) Yes, they can earn a certificate by completing the [minimum certificate] assigned work with 80% or better.

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COURSE INFORMATION

COURSE

CSC464 / CSC 664 3 credit hours

OFFERED

June 1 - July 31, 2020

REQUIRED SKILLS

Java, JavaScript, CSS, <u>or</u> Department's consent.

GRADING POLICY

Assignments/Labs 70% Final project 30%

TEXTBOOK

Visualization Analysis and Design by Dr. Tamara Munzner ISBN 9781466508910 http://bit.ly/CSC464Book Available at the LSUS bookstore

TAUGHT BY

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Information Visualization

CSC464 / CSC664

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