IDC 6940: Capstone in Data Science
Giri NARASIMHAN
www.cs.fiu.edu/~giri/teach/CapDS-Su20.html
Course Preliminaries

- Course Webpage:
  - Lecture Slides; Reading Material; Announcements;
  - VISIT OFTEN!
- Class will meet at specified times suggested on slide 10
- First meeting will be on Thu, May 21
- Office Hours: By Appointment Only
- Email: giri@cis.fiu.edu
- No Final Exam for this class
- This is a variable credit course
Course Plan

- Execute an **industry-relevant** or **research-oriented** project in Data Science
- The project must synthesize concepts from databases, analytics, visualization and management of data.
- The class will meet as specified on Slide 10 tentatively from 4-5 PM
- Class meetings will be used for:
  - Monitoring progress in project and troubleshooting
  - Class presentations
  - Visiting speakers and case histories
Project Overview

- Individual or team effort.
  - Team Size? 1-2

- Projects need one or more faculty mentors to identify, plan, outline and execute
  - Mentor list? On the course webpage

- Projects are encouraged to have an external mentor
  - The external mentor may be a domain expert to provide guidance

- Projects need a 3-person evaluation committee, including your mentor(s) and at least one of Drs. Giri Narasimhan and Miguel Alonso
Project Steps

1. Select Faculty Mentor, Industry/Specialist Mentor, Project Team & Evaluation Committee
2. Select Dataset & Identify Broad Questions
3. Flesh out Details of the Project
4. Write a preliminary Proposal and make a Presentation
5. Meet regularly with mentors and Execute project
6. Discuss preliminary results and Refine project
7. Make final oral Presentation and submit final Project Report
Capstone Project (2 Semester) Plan

SEMESTER 1
- Pick a problem area and mentor
  May 21
- Pick a problem, data set, and formulate questions
  Jun 4
- Download the data; plan tools; identify resources
  Jun 11
- Present preliminary plan and submit project proposal
  Jun 18
- Design algorithms, analyze, visualize & Interpret
  Jun & Jul
- Present preliminary proposal & results
  Jul 23
- Email progress report to course director on first and third Thu every month
Capstone Project (2 Semester) Plan

SEMESTER 2

- First class meeting  
  May 21
- Design algorithms, analyze, visualize & Interpret  
  May & Jun
- Present progress report  
  Jun 18
- Iterate, Improve, Refine  
  Jun & Jul
- Final presentations with Evaluation committee  
  Jul 23
- Final Report, Material, and website  
  Jul 27
Capstone Project (1 Semester) Plan

- Pick a problem area and mentor  
  May 21
- Pick a problem, data set, and formulate questions  
  Jun 4
- Download the data; plan tools; identify resources  
  Jun 11
- Present progress report  
  Jun 18
- Iterate, Improve, Refine  
  Jun 18 thru Jul 23
- Final presentations with Evaluation committee  
  Jul 23
- Final Report, Material, and website  
  Jul 27
Evaluation (1st of 2-Semester Plan)

- Project Proposal: 35%
- Project Progress Reports: 15%
- Proposal Presentation: 50%
Evaluation (2nd of 2-Semester Plan)

- Project Proposal: 10%
- Proposal Presentation: 5%
- Final Project Report: 35%
- Final Project Presentation: 15%
- Project Updates & Execution: 35%
Evaluation (1-Semester Plan)

- Project Proposal 10%
- Proposal Presentation 5%
- Final Project Report 35%
- Final Project Presentation 15%
- Project Updates & Execution 35%
Class Meeting Dates over Zoom

- Class 1  
  May 21

- Class 2 (Progress report)  
  June 18

- Class 3 (Final Presentations)  
  July 23

(All meetings tentatively from 4-5 PM)