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

- 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
- Design algorithms, analyze, visualize & Interpret
- Present progress report
- Iterate, Improve, Refine
- Final presentations with Evaluation committee
- Final Report, Material, and website

This plan also applies for the 1 semester Capstone Project
Course Evaluation (1st Semester)

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

- 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)