

Data Analytics and Prediction

Spring 2020

CS 185C-02: Advanced Practical Computing Topics (Data Analytics and Prediction) Tue & Thur 4:30-5:45PM Room MH 222

COURSE TOPICS

- Introduction to
 - ✓ the best practices, theory, methods, and application of data analytics. .
 - ✓ Numerical data type identification and visualization, data cleaning, data correction, and imputation.
 - ✓ Numerical summary measures, probability distributions, sampling distributions, confidence intervals and measures.
 - ✓ ML topics such as regression (linear & logistic), classification algorithms such as SVM, Statistical-based Naïve Bayes. Generalization (L1 & L2)
 - ✓ Hypothesis formation and testing, ANOVA and nonparametric methods
- How to apply the theory, practice, methods and above mentioned algorithms of data analytics and ML to real-world applications in the life science and business intelligence domains, and to be able to interpret and analyze results will be covered.
- After completing the course, students will have a sound introductory understanding of the data analytics process & methods.

WHO SHOULD ENROLL?

Anyone who wants a solid introduction to data analytics and its application to life science and business applications.

HOW TO ENROLL

Current SJSU Students – Log in to your MySJSU account to search for the course number and section printed above.

Others – Go to the SJSU Open University web page (<http://ou.sjsu.edu>) and click on the link:

How to Register for an On-Site Class.

NOTE: Open Univ. Spring 2020 courses will be visible at the above URL likely by December 2019.

PREREQUISITES

- Junior, Senior, or graduate standing.
- Completed advanced Python programming courses.
- Instructor consent.

PROPOSED TEXTBOOK

Supplemental reference material will be provided.

