

Syllabus - Spring 2025

Excluding materials for purchase, syllabus information may be subject to change. The most up-to-date syllabus is located within the course in HuskyCT.

Course and Instructor Information

Course Title: CSE 5717 -002 (Big Data Analytics) **Credits:** 3.

Prerequisites: CSE 3500, MATH 2210

Meeting time: TuTh 5PM - 6:15PM

Classroom: [Wei, Wei's Personal Room](#)

Discussion: We use Piazza for discussion.

Official Announcements and Grades: We use the HuskyCT system available at lms.uconn.edu.

Instructor: Wei Wei, Associate Professor in Residence

Email: wei.wei@uconn.edu

Office: [ITE 258](#)

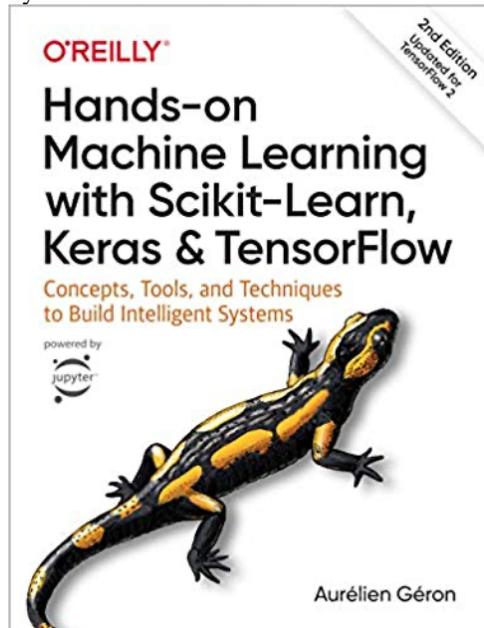
Office Hours: Monday, Wednesday 1:30 pm – 2:30 pm. (ITE 258)

Online Office Hours: Tuesday 1:30 pm – 2:30 pm. [Wei, Wei's Personal Room](#)

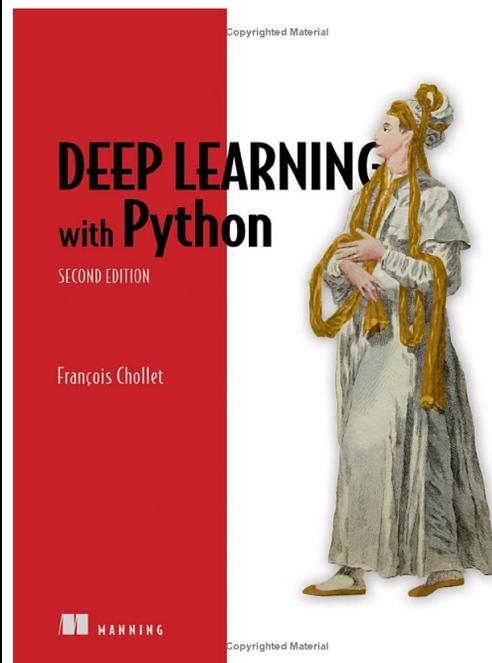
Course Materials

Required Textbooks:

Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow: Concepts, Tools, and Techniques to Build Intelligent Systems 2nd Edition
by Aurélien Géron



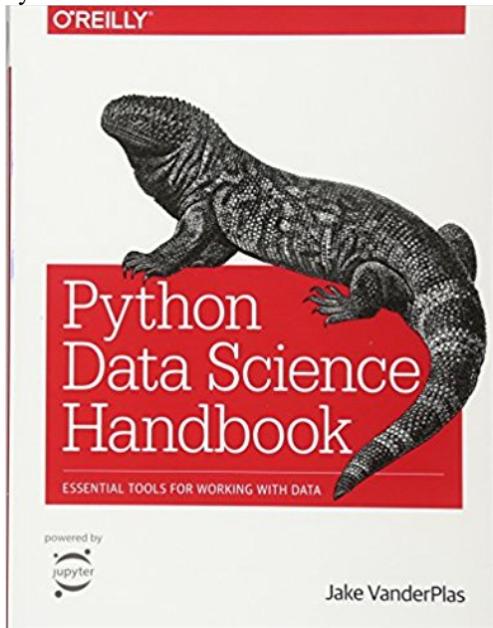
Deep Learning with Python 2nd Edition
by Francois Chollet



Reference Book:

Python Data Science Handbook: Essential Tools for Working with Data 1st Edition

by Jake VanderPlas



Course Outline and Calendar

Week #1	NumPy, Pandas, and Matplotlib
Week #2	NumPy, Pandas, and Matplotlib
Week #3	End-to-End Big Data Analytics Project
Week #4	Classification Team Project Proposal Due
Week #5	Training Models
Week #6	Support Vector Machines and Decision Trees
Week #7	Ensemble Learning and Random Forest
Week #8	Dimensionality Reduction Team Project Progress Report
Week #9	Unsupervised Learning Techniques
Week #10	Fundamentals of Deep Learning
Week #11	Deep Learning for Computer Vision
Week #12	Deep Learning for Text and Sequences
Week #13	Autoencoders
Week #14	Team project presentations

Homework and programming assignments:

There will be 8 programming assignments. Programming assignments need to be submitted electronically via HuskyCT. **Note the only accepted file format is .ipynb.**

Course Requirements and Grading

Summary of Course Grading:

Course Components	Weight
Programming Assignments	50%
Quizzes	10%
Team Project	40%

Grading Scale:

Grade	Letter Grade	GPA
93-100	A	4.0
90-92	A-	3.7
87-89	B+	3.3
83-86	B	3.0
80-82	B-	2.7
77-79	C+	2.3
73-76	C	2.0
70-72	C-	1.7
67-69	D+	1.3
63-66	D	1.0
60-62	D-	0.7
<60	F	0.0

Due Dates and Late Policy

All course due dates are identified in the (choose appropriate location). Deadlines are based on Eastern Standard Time; if you are in a different time zone, please adjust your submittal times accordingly. *The instructor reserves the right to change dates accordingly as the semester progresses. All changes will be communicated in an appropriate manner.*

No late homework accepted.

Feedback and Grades

I will make every effort to provide feedback and grades in one week. To keep track of your performance in the course, refer to My Grades in HuskyCT.

Student Responsibilities and Resources

As a member of the University of Connecticut student community, you are held to certain standards and academic policies. In addition, there are numerous resources available to help you succeed in your academic work. Review these important [standards, policies and resources](#), which include:

- The Student Code
 - Academic Integrity
 - Resources on Avoiding Cheating and Plagiarism
- Copyrighted Materials
- Netiquette and Communication
- Adding or Dropping a Course
- Academic Calendar
- Policy Against Discrimination, Harassment and Inappropriate Romantic Relationships
- Sexual Assault Reporting Policy

Students with Disabilities

Students needing special accommodations should work with the University's [Center for Students with Disabilities \(CSD\)](#). You may contact CSD by calling (860) 486-2020 or by emailing csd@uconn.edu. If your request for accommodation is approved, CSD will send an accommodation letter directly to your instructor(s) so that special arrangements can be made. (Note: Student requests for accommodation must be filed each semester.)

Blackboard measures and evaluates accessibility using two sets of standards: the WCAG 2.0 standards issued by the World Wide Web Consortium (W3C) and Section 508 of the Rehabilitation Act issued in the United States federal government.” (Retrieved March 24, 2013 from [Blackboard's website](#))

Help

[Technical and Academic Help](#) provides a guide to technical and academic assistance.

This course is completely facilitated online using the learning management platform, [HuskyCT](#). If you have difficulty accessing HuskyCT, you have access to the in person/live person support options available during regular business hours through the [Help Center](#). You also have [24x7 Course Support](#) including access to live chat, phone, and support documents.

Evaluation of the Course

Students will be provided an opportunity to evaluate instruction in this course using the University's standard procedures, which are administered by the [Office of Institutional Research and Effectiveness](#) (OIRE).

Additional informal formative surveys may also be administered within the course as an optional evaluation tool.