is597_mlc_course_roadmap_summer_2024_as_of_2024_06_07.xlsx

WK	Topics	Readings	In-Class Activities	Assignments	Final Project (FP)
1	Course Startup What is Machine Learning	Syllabus Roadmap Géron Chap. 1	Introduce Yourself Lecture: What is Machine Learning Computing Setup: Your own computer		
2	Intro to Cloud Computing	See links in Weekly Schedule	Lecture: Intro to Cloud Computing Discussion: Potential Final Project Ideas	Computing Setup: AWS Academy Learner Lab (Login Account) AWS Academy Learner Lab (User Guide & Service Access)	
3	Python for ML Crash Course - Part 1	McKinney Chaps. 2, 4	Breakout Discussion	Jupyter Notebook Numpy	Research FP Candidates
4	Python for ML Crash Course - Part 2	McKinney Chaps. 5, 6, 7, 9	Review Solutions Breakout Discussion	Matplotlib	Research FP Candidates
5	Data Preprocessing Using Cloud Computing	Raschka & Mirjalili Chap. 4	Review Solutions Breakout Discussion	Data Preprocessing	Research FP Candidates
6	Holiday Week - No Class Meeting				Research FP Candidates
7	Building Pipelines For Machine Learning	Géron Chap. 2	Review Solutions Breakout Discussion	Building ML Pipelines (includes feature engineering for textual data)	FP Proposal Due
8	Feature Engineering (for numeric data)		Review Solutions Breakout Discussion		Work On FP
9	Training Models on Cloud Platforms Testing and Evaluation Using Cloud Computing	Géron Chaps. 3, 4 Raschka & Mirjalili Chap. 10	Breakout Discussion	Model Training (includes feature eng. For numeric data, training, and testing and evaluation)	Work On FP
10	Dimensionality Reduction Model Tuning	Géron Chap. 8 Raschka & Mirjalili Chaps. 5, 6, 7	Review Solutions Breakout Discussion	Dimensionality Reduction & Model Tuning	Work On FP
11	Work on Final Project				Work On FP
12	Work on Final Project				FP Deliverables Due