

	Monday	Tuesday	Wednesday	Thursday	Friday
Wk 1 AM	Orientation	Foundations <ul style="list-style-type: none"> ➤ Consciousness Theory - On Intelligence w Jeff Hawkins - Hard problem of consciousness Video w David Chalmers - David Chalmers Consciousness paper - Stanford Encyclopedia Consciousness ➤ Intelligence Theory - Intelligence Overview w Deary - On measure of Intelligence - Chollett - A Thousand Brains – Jeff Hawkins ➤ Network Neuroscience Theory - Neuroscience Differences ➤ Exercise: ML w Random Forest ➤ Classic approach 	AI + Ethics <ul style="list-style-type: none"> ➤ Ethical Paradigms - Hitchhiker's Overview - Right, Good, Just (Locke, Hume) - Theory Summary ➤ The Alan Turing Institute – AI Ethics - Facebook Social Responsibility - Timnet Gebru, Google - Algorithmic Ethics in ML w Michael Kearns ➤ Bias Fundamentals ➤ Algorithm Bias ➤ Chatbot bias (MIT) ➤ Exercise: Graphing 	AI + Medicine <ul style="list-style-type: none"> ➤ AI in Medicine ➤ Medicine's Future w AI ➤ Guest Speak Case Study / Guest Speaker: Covid Vaccine Discovery. AI was a key part of COVID vaccine research and research into effective existing drugs or repurposing drugs. One source that many research uses for drug-related datasets is ➤ Exercise: Feature Engineering 	AI + Business + Robots <ul style="list-style-type: none"> ➤ Ethical Paradigms - Mechanic Turing - Boston Dynamics Dancing Robots ➤ The Business future of AI ➤ Exercise: Geocodes
Wk 1 PM	Frameworks <ul style="list-style-type: none"> ➤ What is AI and ML Overview? - Basic Concepts - MIT ML Overview - Understanding ML Textbook ➤ Importance Vectors - Personal Vectors - Societal Vectors (IBM) - Existential Impacts (Elon Musk) ➤ Resources & Community ➤ MyAnalysis: Frameworks ➤ Exercise: Exploring Data 	Foundations <ul style="list-style-type: none"> ➤ AI Fundamentals Review - Brookings Institute AI Overview - Hitchhikers AI Guide ➤ Machine Learning Tools - Algorithms - Machine Learning Project Workflow ➤ Manual ML Walkthrough w NASA Helicopter Exercise ➤ MyAnalysis: Confusion Matrix ➤ Exercise: TensorFlow Image Classification Basics with Confusion Matrix 	AI + Ethics <ul style="list-style-type: none"> ➤ Bias structure and AI penetration ➤ Neural Networks 101 - Neural Net Interactive - Neural Networks Theory - Neural Networks Images ➤ MyAnalysis: Accuracy ➤ Data Set: Image MNIST ➤ Exercise: TensorFlow Image Classification with Convolutions 	AI + Medicine <ul style="list-style-type: none"> ➤ AI in Medicine - Covid-19 - AI drug discovery - AI Mental Health ➤ MyAnalysis: DrugData ➤ Data Set: Drug datasets ➤ Exercise: Drug Discovery 	AI + Surveillance <ul style="list-style-type: none"> ➤ Surveillance ➤ MyAnalysis: Weekly Recap ➤ Data Set: Facial Data ➤ Exercise: Facial Recognition

