## UDACITY - INTRODUCTION TO 2. What is machine learning? It is a data science technique used to whack patterns from data allowing computors to identify related data, forceast petive outcomes, behaviors & trends. How is reachine learning different from traditional programming! Answers Traditional Ingranning Machine Leavining Rules Linuitation of traditional programming - we might might not come up with the best rules. In ML, we have historical data 4 the onswers Algorithm defines rulationship by w data & answers to come up with rules · ML allows computers to learn automatically based or observation ordata. 3. Application of ML Statistical machine learning, Techniques used: Reinforcement learning

4. Applications of ML 1 \* Ibject deterion => describing the contents of an image. \* LIDAR - a method of measuring distances by f reasuring the reglection with a sersor. Test-summarization, · Sey-driving cars) topic detection, /1 ·Object detection I similarity, search! · Object identification Speech-speech Natural Natural Natural Natural V. LIDAR and Visible Computer Spectrum Vision to speech, processing ML · Deep Learning Reinforcement

Decision learning

Analytics

Making

Analytics

An ( Prediction payorming tasks > legression · Sequential classification, forecesting, Clustering · Recommenders - ophimizing content recommendations based on ver interaction. Exemples of ML Automating the recognition of disease · Recommend next-best actions for individual core plans: (// EMR & EHR septem - data digitalization) EMR - Elichonic medical record - digital chart EHR- Elichonic Health neword - more holistic, ey (1BM Warson Ancology) long-town view of patients

Enabling personalized, real-time banking for I experiences with chatbots - (1st wave of cushomer contact) (\* IVR- Interactive voice response) eg sentiment analypis · Odentify the new best action for customer I recommender on apture, projective & route cornice requests to the correct employee to improve response times. · AI - A broad term that refers to computers thinking more like humans. • ML - A sub-category of AI that involves decring from data without being explicitly programmed. · Deep Learning - A subcategory of ML Utat uses a layered neural-network architection originally inspired by the human brain. // DL-has a "probability vector". - highly educated guess. // training is required. ( DL )