Lecture Notes

Content:

STAR WORDS. FANS WOULD BE FAMILIAR WITH THE GOLDEN LIFE SIZED HOSPITALITY ROBOT SEE THREE P? O, WHILE STAR WORDS MIGHT BE SET IN A GALAXY FAR, FAR AWAY. THE REALITY OF HAVING MACHINES TALK AND RESPOND TO US IN A HUMAN LIKE MANNER IS ALREADY A REALITY WHICH KEEPS GETTING MORE AND MORE REALISTIC WITH EVERY PASSING DAY. THE PEOPLE YOU ASK FOR QUERIES ON WEBSIDES, YOUR SMART ASSISTANTS, EVEN CALLS MADE OVER THE INTERNET- ALL OF THEM HAVE ONE THING IN COMET: NONE OF THEM ARE ACTUALLY HUMAN. NOW, YOU MUST BE THINKING. IF THEY ARE NOT HUMAN, HOW DO THEY MANAGE TO SOUND AND SEEMS SO HUMAN LIKE, HOW DO THEY RESPOND TO ME SO INTELLIGENTLY AND HOW ARE THEY SO ARTICULATE? THIS, MY FRIENDS, IS THE MAGIC OF NATURAL LANGUAGE PROCESSES. WHAT IS, IN L? P, NATURAL LANGUAGE PROCESSI, OR IN L? P, REFERS TO THE BRANCH OF ARTIFICIAL INTELLIGENCE THAT GIVES THE MACHINES THE ABILITY TO READ, UNDERSTAND AND DERIVE MEANING FROM HUMAN LANGUAGES. IN L? P COMBINES THE FIELD OF LINGUISTICS AND COMPUTER SCIENCE TO DECIPHER LANGUAGE STRUCTURE AND GUIDE LINES AND TO MAKE MODELS WHICH CAN COMPREHEND, BREAK DOWN AND SEPARATE SIGNIFICANT DETAILS FROM TEXT AND SPEECH. EVERY DAY, HUMANS INTERACT WITH EACH OTHER THROUGH PUBLIC SOCIAL MEDIA, TRANSFERRING FAST QUANTITIES OF FREELY AVAILABLE DATA TO EACH OTHER. THIS DATA IS EXTREMELY USEFUL IN UNDERSTANDING HUMAN BEHAVIOR AND CUSTOMER HABITS. DATA ANALYSTS AND MACHINE LEARNING EXPERTS UTILIZE THIS DATA TO GIVE MACHINES THE ABILITY TO MIMIC HUMAN LINGUISTIC BEHAVIOR. THIS HELP SAVE MILLIONS AND TERMS OF MAN POWER AND TIME, AS YOU DON'T NEED TO ALWAYS HAVE A PERSON PRESENT AT THE OTHER END OF THE PHONE. IN L P IS ALSO A LOT MORE WIDESPREAD THAN YOU MAY REALIZES. YOU USE IT EVERY DAY AND SEEMINGLY NORMAL AND

INSIGNIFICANT SITUATIONS. DON'T KNOW HOW TO CORRECTLY SPELLO WORD AUTO CORRECT HAS YOU COVER NEED. DECEIVE YOUR ARTICLE OR THESIS WILL GET FLAG FOR COPYRIGHT VIOLATIONS. THAT'S O KD. A PLAGIARISM CHECKER WILL SEARCH THROUGH THE WEB AND FIND ANY CASES OF PUBLISH DOCUMENTS WHICH MAY MATCH YOUR WORK LINE BY LINE. WHILE N L P SEEMS REALLY COOL, YET A CUTTING EDGE AND COMPLICATED TECHNOLOGY CONCEP. IT IS ACTUALLY PRETTY EASY TO LEARN. YOU START OFF WITH A DOCUMENT OR AN ARTICLE. TO MAKE YOUR ALGARITHM UNDERSTAND WHAT IS GOING ON IN IT, YOU NEED TO PROCESSES INTO A FORM WHICH IS EASILY COMPREHENDSABLE BY THE MACHINE. THIS IS NO DIFFERENT THAN MAKING A CHILD LEARN TO READ FOR THE FIRST TIMEYOU START OFF BY PERFORMING SEGMENTATION WHICH IS TO BREAK THE ENTIRE DOCUMENT DOWN INTO ITS CONSTITUENT SENTENCES. YOU CAN DO THIS BY SEGMENTING THE ARTICLE ALONG ITS PUNCTUATIONS, LIKE FULL STOPS AND COMETS FOR THE ALGARITHM. TO UNDERSTAND THESE SENTENCES, WE GET THE WORDS IN A SENTENCE AND TO EXPLAIN THEM INDIVIDUALLY TO OUR ALGARITHT. SO WE BREAK DOWN OUR SENTENCE INTO ITS CONSTITUENT WORDS AND STORE THEN THIS IS CALLED TOKENIZING, WHERE EACH WORD IS CALLED A TOKEN. WE CAN MAKE THE LEARNING PROCESS FASTER BY GETTING RID OF NON ESSENTIAL WORDS WHICH DO NOT ADD MUCH MEANING TO OUR STATEMENT AND ARE JUST THERE TO MAKE OUR STATEMENT SOUND MORE COHESIVE. THESE WORDS, SUCH AS R AND THE, ARE CALLED STOP WORDS. NOW THAT WE HAVE THE BASIC FORM OF OUR DOCUMENT, WE NEED TO EXPLAIN IT TO OUR MACHINE. WE FIRST START OFF BY EXPLAINING THAT SOME WORDS LIKE SKIPPING, SKIPS, SKIPPED ARE THE SAME WORD WITH ADDED PREFIXES AND SUFFIXES. THIS IS CALLED STEMIN. WE ALSO IDENTIFY THE BASE WORDS FOR DIFFERENT WORD: TENS, MOOD, GENDER ET CETERA. THIS IS CALLED LEMATIZATION, STEMMING FROM THE BASE WORD LEMA. NOW WE EXPLAIN THE CONCEPT OF NOUNS VERBS, ARTICLES AND OTHER PARTS OF SPEECH TO THE MACHINE BY ADDING THESE TAGS TO OUR WORDS. THIS IS CALLED PART OF

SPEECH TAGGIN. NEXT, WE INTRODUCE OUR MACHINE TO POP CULTURE, REFERENCES AND EVERYDAY NAMES BY FLAGGING NAMES OF MOVIES, IMPORTANT PERSONALITIES OR LOCATIONS ET CETERA THAT MAY OCCUR IN THE DOCUME. THIS IS CALLED NAMED INTO TY TAGGIN. ONCE WE HAVE OUR BASE WORDS AND TAGS. WE USE A MACHINE LEARNING ALGARITHM, LIKE NAIVE BAYS, TO TEACH OUR MODEL HUMAN SENTIMENT AND SPEECH. AT THE END OF THE DAY, MOST OF THE TECHNIQUES USED IN IN L P ARE SIMPLE GRAMMAR TECHNIQUES THAT WE HAVE BEEN TAUGHT IN SCHOO. HERE IS.

Knowledge Expansion:

No relevant Wikipedia pages found.