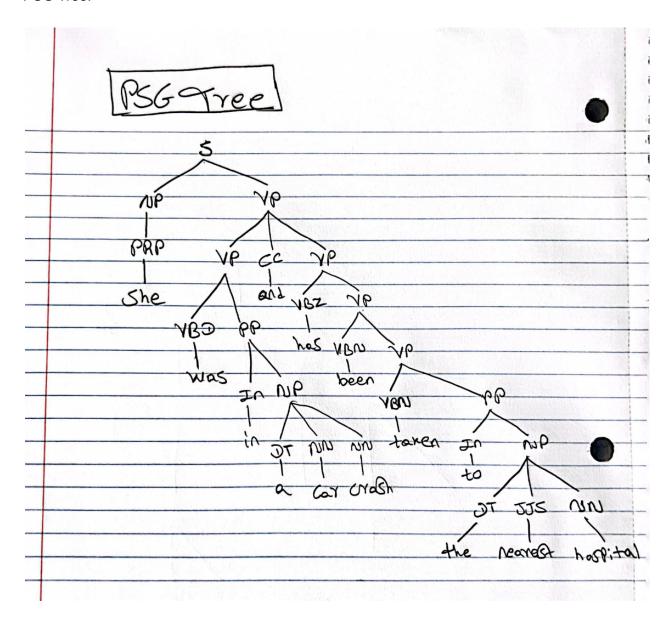
Biruk Mamo

Sentence: She was in a car crash and has been taken to the nearest hospital PSG Tree:



Phase Terms and their Definitions:

CC: Coordinating Conjunction

DT: Determiner **IN**: Preposition

JJS: Adjective, superlative

NN: Noun, singular **NP**: Noun Phrase

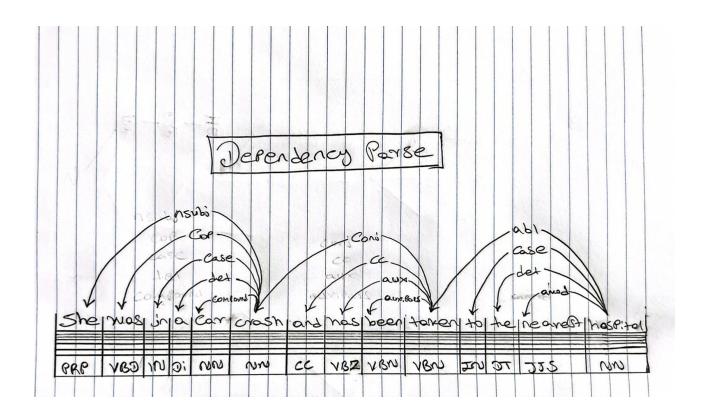
PRP: Personal Pronoun
PP: Prepositional Phrase
VBD: Verb, past tense

VBN: Verb, past participle

VBZ: Verb, 3rd person singular present

VP: Verb Phrase

Dependency Parse:



Phase Terms and their Definitions

NSUBJ: Nominal Subject

COP: Copula

COMPOUND: Compound

CONJ: Conjunct **CC**: Coordination **AUX**: Auxiliary

AUX:PASS: Passive Auxiliary

OBL: Indirect Nominal CASE: Case Marking DET: Determiner

AMOD: Adjectival Modifier

SRL Parse:

Verb 1: was

Predicate: was in a car crash

ARG0: She

ARG1: in a car crash

Relation between the arguments: **Arg0** is the agent of the sentence and **Arg1** is something that happened to **Arg0**.

Verb 2: taken

Predicate: taken to the nearest hospital

ARG0: She

ARGM: to the nearest hospital **Tag of the Modifier**: GOL

GOL: final destination of motion verbs

Relation between the argument and modifier: **Arg0** is the agent of the sentence and

ARGM is where the agent ended up.

Pros and Cons of Parsers:

In my view, the PSG tree was the simplest parser compared to the other two, and it provided us with a valuable list of parts of speech that is applicable to many machine learning algorithms. However, the PSG tree does not analyze the grammatical structure of the sentence. Dependency parsing, on the other hand, was challenging to determine the relationships between each word, but it gave us a list of parts of speech and explored the dependencies between the words, which is superior to the PSG tree and is more beneficial for applications requiring grammatical analysis. Lastly, SRL parsing is simple to implement, but I'm unsure if it's as valuable in machine learning algorithms

because it only recognizes different actors and aspects of an action without providing information on the role of each word.