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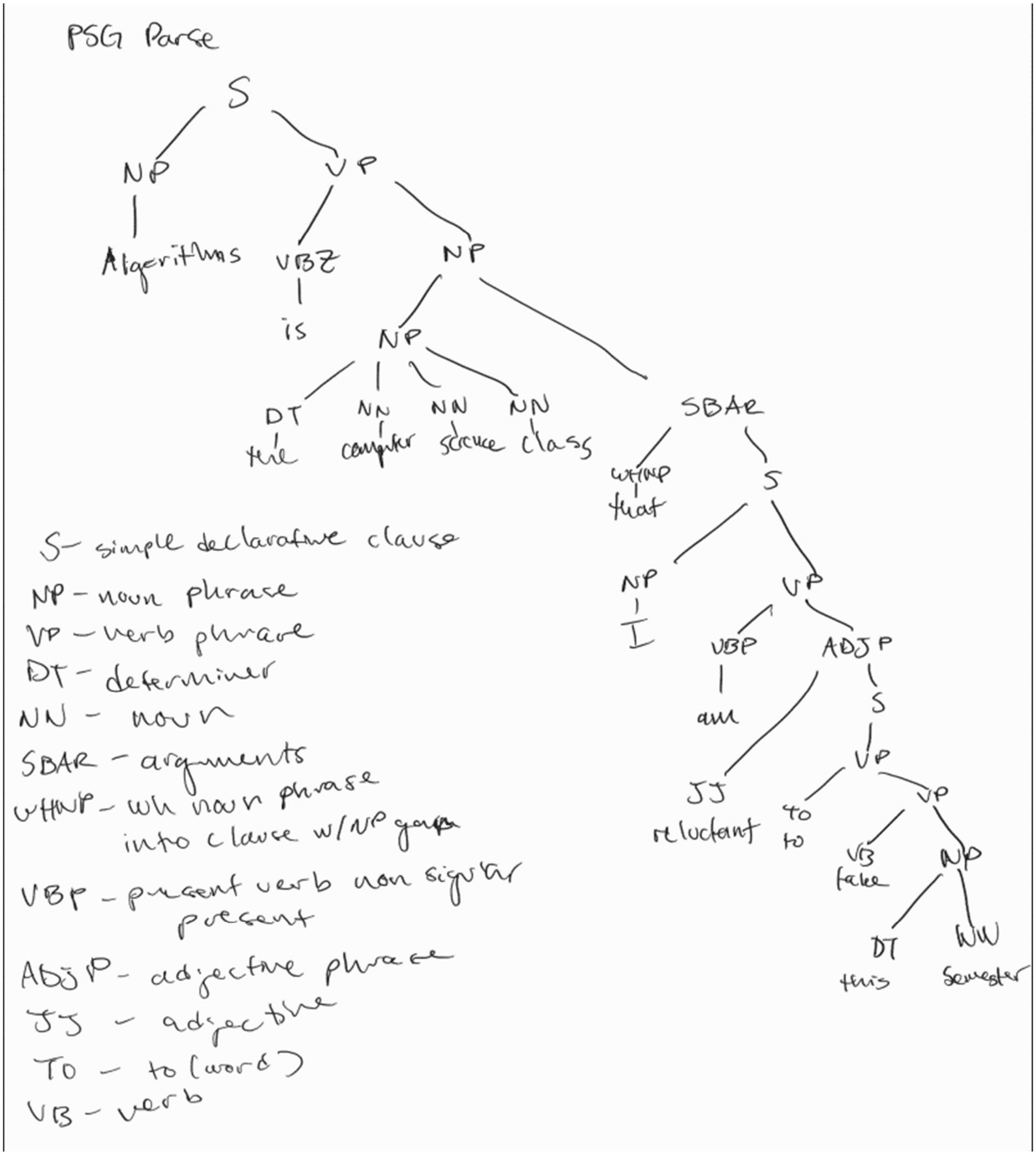
CS 4395.001

Portfolio: Syntax Parsing

1. Algorithms is the computer science class that I am reluctant to take this semester.
2.



S- simple declarative clause

NP - noun phrase

VP - verb phrase

DT - determiner

NN - noun

SBAR - arguments

WHNP - wh noun phrase into clause w/NP gap

VBP - present verb non singular present

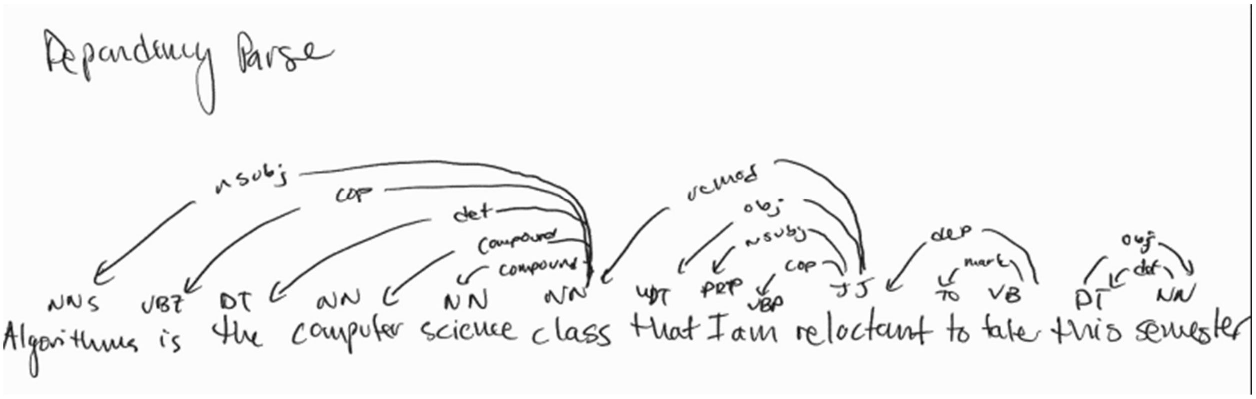
ADJP - adjective phrase

JJ - adjective

TO - to (word)

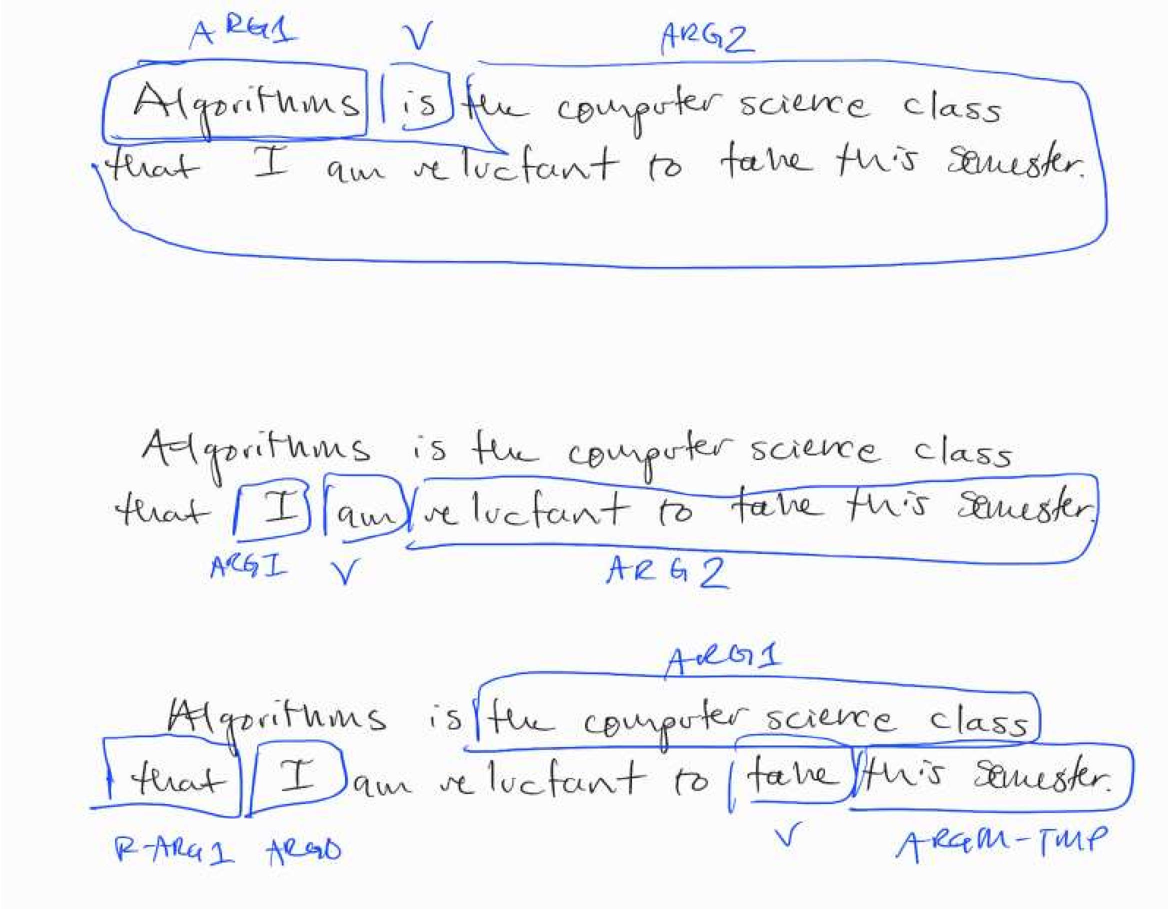
VB - verb

3.



- nsubj – nominal subject: syntactic subject of a clause
- cop – copula: complement of a copular verb
- det – determiner
- compound – noun compound modifier, modify head noun
- rcmod – relative clause modifier, modifies noun phrase
- obj – object
- mark – marker, introduces adverbial clause modifier or clausal complement

4.


ARG1
V
ARG2
Algorithms is the computer science class that I am reluctant to take this semester.
Algorithms is the computer science class that I am reluctant to take this semester.
ARG1
V
ARG2
ARG1
Algorithms is the computer science class that I am reluctant to take this semester.
R-ARG1
ARG0
V
ARGM-TMP

- verb – is
    - ARG1 is the thing being described by ARG2
    - ARG1 – passive actor
    - ARG2 – end state, attribute
- verb – am
    - ARG1 is the actor that is described by ARG2’s action or feeling of reluctance
    - ARG1 – passive actor
    - ARG2 – end state, attribute
- verb – take
    - ARG0 is the actor that takes ARG1
    - R-ARG1 is the referent to ARG1
    - ARGM-TMP is when the action happened
    - ARG0 – main actor

5. Pros and cons for each parse:
    a. PSG parse – For a sentence like this, the size of the parse tree is large, making it hard to read and parse. However, this parse has the most information about the sentence.
    b. Dependency parse – Again, the complexity of the sentence affects the readability of the representation. However, the ability for this parse to work across languages makes this parse versatile and applicable to many situations
    c. SRL parse – This parse needs to be used cautiously since rules and arguments vary for different verbs and the parse can be inconsistent. However, this parse is the closest that parsing comes to actual semantics of a sentence.