

## NATURAL LANGUAGE PROCESSING

Introduction; Goals of natural language processing and computational Linguistics. Finite state automata and transducers, Morphology.

Parsing: Context free Grammers, Generalized phrase structure Grammer, Earley Parsing Algorithm. Transformational grammer, computational models and knowledge representations, semantics; Interpretation, time, tense, lexical semantics , machine translations, Natural Language Interfaces, Natural Language Generators..

### BOOKS:

1. Allen James , Natural Language Understanding, 2<sup>nd</sup> ed. Benjamin/ Cumming, 1995.
2. Grosz, Sparck-Jones Webber readings in Natural language Processing, Morgan Kufmann, 1986.
- 3 . Winograd T., Language as a Cognitive, process, Addison Wesley, 1972.
4. Marcus M., a Theory of Syntactic Recognition for natural language, MIT press, 1980