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TTS modules (general scheme)

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Contents

1. Introduction

This document provides the scheme with general modules to be developed during the current project (that can be considered to be the first stage of TTS development).

Local Language Speech Technology Initiative

Input Text

Sentence extraction
Tokenisation (Word extraction)

DATA CREATION

Text Corpus
(for POS tagging)

Text Corpus
(for speech corpus creation)

Phonetically Rich Sentences

Morpho-syntactic analysis
Morphological decomposition
Chunking and Phrasing
Processing of non-functional and content words
POS tagging;

Text Normalisation
Homograph Disambiguation
Proper name processing

LEXICONS

Lexicon for MD
–→ stem and affix
dictionary (with
morphological rules)
–→ compound words

Lexicon with proper names

**Lexicon with non-
functional words**

List of homographs

List of TN items

Recordings

Speech corpus N1

Speech corpus N2

**Grapheme-to-phoneme conversion (with stress and
tone assignment if applicable)**
Phoneme-to-allophone (phone) conversion

Annotation & Segmentation

Annotation & Segmentation

Prosody

Assignment of Pitch– **MOMEL/IntSint**
Assignment of Duration – Festival CART tool

**Extract Prosody – phrase
boundaries**

Extract Prosody – pitch
MOMEL/IntSint

TTS ENGINE

• –→ Unit selection procedure
• –→ Pitch modification MOMEL/IntSint

Speech Database

Speech output