

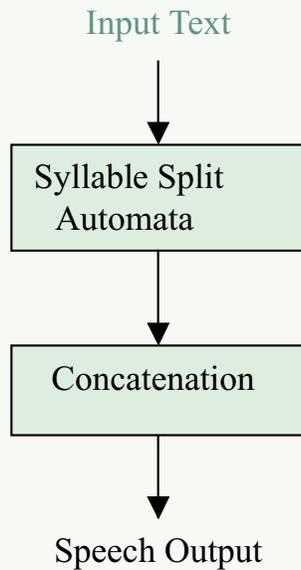
(Screen shot of ORITTS peaks the .aci file provided by the user and utters)

- 1. Name of the Technology Ethiroli
- 2. Nature of Technology Language Technology Product
- 3. Level Product

4. A Technical Description

Ethiroli is a Text to Speech package for Tamil. When Tamil text is given as input, it splits the text into syllables using "CCVC" model. Once the syllables are identified in sequence from the given text, the sound files corresponding to the syllables are concatenated and played in sequence to give the speech output. Ethiroli uses linguistic rules to remove homographic ambiguities.

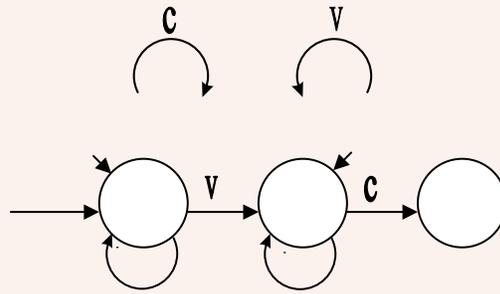
4.B Block Diagram



The following are the important modules handled in Ethiroli:

Syllable Split Automata:

Tamil input text is split into syllables using "cvcc" model. The "cvcc" model is explained by the following diagram



C - Consonant, V - Vowel

Concatenation

Concatenation is a technique for producing sound from the text. It uses set of sounds for all the basic sound elements (syllables) that can occur in the language. The given text is split into syllables, the corresponding sounds are concatenated and played. The advantage of this method is that it gives smooth output without much processing time. It needs the entire list of syllables in the Tamil language.

4.C User Interface:

Input

- * Input can be given from a file (TAM encoded) OR
- * The following Tamil keyboard drivers are provided for typing

- Tamilnet 99 - Standard Tamil keyboard
- Typewriter (Thattachu) - Standard Tamil Typewriter keyboard
- English 1 (Aangkilam 1) - Transliterated format - Similar to TAB font
- English 2 (Aangkilam 2) - Transliterated format - Similar to TAM font

- * Save the typed text by "Save" button.
- * Clear the input by "Clear" Button.

Output

- * "Play" button to get the audio output for the input text.
- * To stop the audio use "Stop" button.

4.D Specifications of the Technology:

Ethioli was developed using Visual Basic 6.0 and Access 98 in Windows environment.

Minimum Requirement:

Any keyboard driver to type Tamil
Font encoding scheme in TAM

5. Representative Snapshots:



- 6. A. Expandability: Yes
- 6. B. Portability: Yes
- 7. Readiness of Transfer of Technology: Yes
- 8. Availability of Documentation: User and Technical manuals are available.
- 9. Testing of the Product: The product has been tested with files from corpus.
- 10. Open Source: Yes
- 11. Potential Beneficiaries Visually Handicapped Persons, Public and students.
- 12. User Agency Tie up: No
- 13. Name & address of the Resource Person:

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