

Final Year Project Proposal

Muhammad iftikhar ,Aimen Wadood, Hamza Majeed.

{p180054, p180002, p180128}@nu.edu.pk

Suggested Supervisor:

Faculty Member's Name: Dr Taimoor khan

Signature: _____

Date (17 September 2021)

Project Details

Project Title	<i>Pushto Text to Speech System</i>		
Project Area of Specialization	Natural language processing, Artificial Intelligence.		
Project Start Date	2021-9-17	Project End Date	2022-09-17
Project Summary (less than 2500 characters)	We will built a system which will take Pashto text as input and will generate output as speech. We will work only in specific dialect.		
Project Objectives (less than 2500 characters)	<ol style="list-style-type: none">1. To prepare a reasonable size corpus of Pashto text and corresponding speech.2. Develop text to speech system model for Pashto3. To evaluate the model based on intelligibility and naturalness of speech objective and subjective measure.		
Project Implementation Method (less than 2500 characters)	Various methods such as HMMs and different neural net-work architectures such as RNNs and its variations LSTM and BLSTMs, MDNs, and others have been applied to achieve intelligible and natural synthesized speech. However, more research is required to address these issues.		

Benefits of the Project (less than 2500 characters)	<p>1. Will help visually impaired people in reading.</p> <p>2. Will help speech impaired people in communication.</p> <p>3. Useful in cross culture communication.</p> <p>4. Useful in audio book reading.</p>
Technical Details of Final Deliverable (less than 2500 characters)	In the Past Used Different approaches to tackle this problem like formant method and articulatory method to address the text but state of the art is Concatenative method but this one also fail on unseen data. We Will move toward machine learning to handle this problem.
Final Deliverable of the Project	Final product will be web application.
Type of Industry	Natural language processing, Artificial Intelligence
Technologies	
Sustainable Development Goals	1. As Pashto language is not yet fully recognized globally so it will get importance.

Project Key Milestones

Elapsed time in (days or weeks or month or quarter) since start of the project	Milestone	Deliverable
FYP-1	1st 4 Months	
FYP-2	2nd 4 Months	

Project Equipment Details

Item Name	Type	No. of Units	Per Unit Cost (in Rs)	Total (in Rs)
Azure Credits	Web service	2	500	1000

| Project Proposal: Project Title

			Total in (Rs)	1000