Informatics Institute of Technology

In Collaboration With

University of Westminster, UK



*University of Westminster, Coat of Arms*

Generalized Abstractive Text Summarization Using Optimized Transformers

Design

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**Acronyms**

|  |  |
| --- | --- |
| AI | Artificial Intelligence. |
| DL | Deep Learning |
| GUI | Graphical User Interface |
| ML | Machine Learning |
| NLP | Natural Language Processing |
| ROUGE | Recall-Oriented Understudy for Gisting Evaluation. |
| BLEU | BiLingual Evaluation Understudy. |
| T5 | Text to Transfer Transformer. |
| BART | Bidirectional Auto-Regressive Transformers. |
| BERT | Bidirectional Encoder Representations from Transformers. |
| PEGASUS | Pre-training with Extracted Gap-sentences for Abstractive Summarization Sequence-to-sequence |
| ILP | Inductive logic programming. |
| LSTM | Long Short-Term Memory. |
| RNN | Recurrent Neural Network. |
| CNN  SEQ2SEQ | Convolutional Neural Network.  Sequence to Sequence |
| RoBERTa | Robustly Optimized BERT Pre-training Approach |
| GPT-3  REST  GPU | Third Generation Generative Pre-Trained Transformer  Representational State Transfer  Graphical Processing Unit |

# CHAPTER OVERVIEW

# DESIGN GOAL

Table 6.1 – Design Goals of the proposed system

|  |  |
| --- | --- |
| **Design Goal** | **Description** |
| Performance |  |
| Correctness |  |
| Usability |  |
| Scalability |  |
| Adaptability |  |

# HIGH-LEVEL DESIGN

# SYSTEM DESIGN

## Choice of the Design Paradigm.

## Data Flow Diagram

## Algorithm Design

## 4.4 UI Design

# CHAPTER SUMMARY

# REFERENCES