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## **Modified Approach to Code Summarization**

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Abstract: Code summarization is the process of automatically generating a concise and informative summary of a given code snippet. It aims to assist software developers in understanding the functionality of the code. In this paper, we review three approaches for code summarization. The approach leverages the hierarchical structure of the abstract syntax tree (AST) of the code, which represents the syntactic structure of the code. The AST is encoded using a tree-LSTM network, which is capable of capturing the structural information of the AST. The encoded tree-LSTM representation of the AST is then fed into a decoder network to generate the summary. The Tree-LSTM-based approach for code summarization has shown promising results in capturing the hierarchical structure of the code and generating accurate and concise summaries. Further research can explore the integration of additional semantic information and the extension of our approach to other programming languages

Keywords: BASTS, AST, Encoder-Decoder, Sentence-Weight algorithm

