



CODE SEMANTIC DETECTION AND OPTIMIZATION

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Guide



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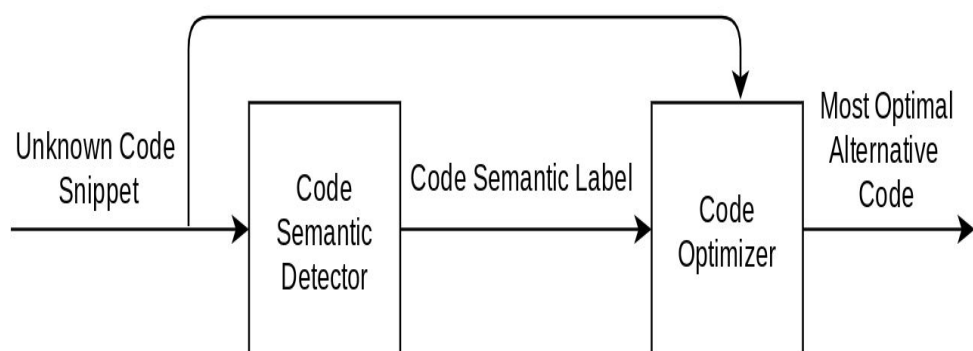


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Problem Statement



Results and Discussion



Obtained optimization and prediction accuracies of both Python and C++ above 85%



Developed POC works for program labels spanning across 25 famous DSA problems from about 8 DS/Algo categories



Code Vectors for labels are independent of program language => Code Semantic Detection is language agnostic

Dataset and Features / Project Requirements / Product Features

Detects semantics and suggests optimized alternatives for Python and C++

Learns a program with the label as given function name

Ranks input program against known alternatives for that semantic label

Compares input programs amongst themselves based on composite metric

Design Approach / Methods

