

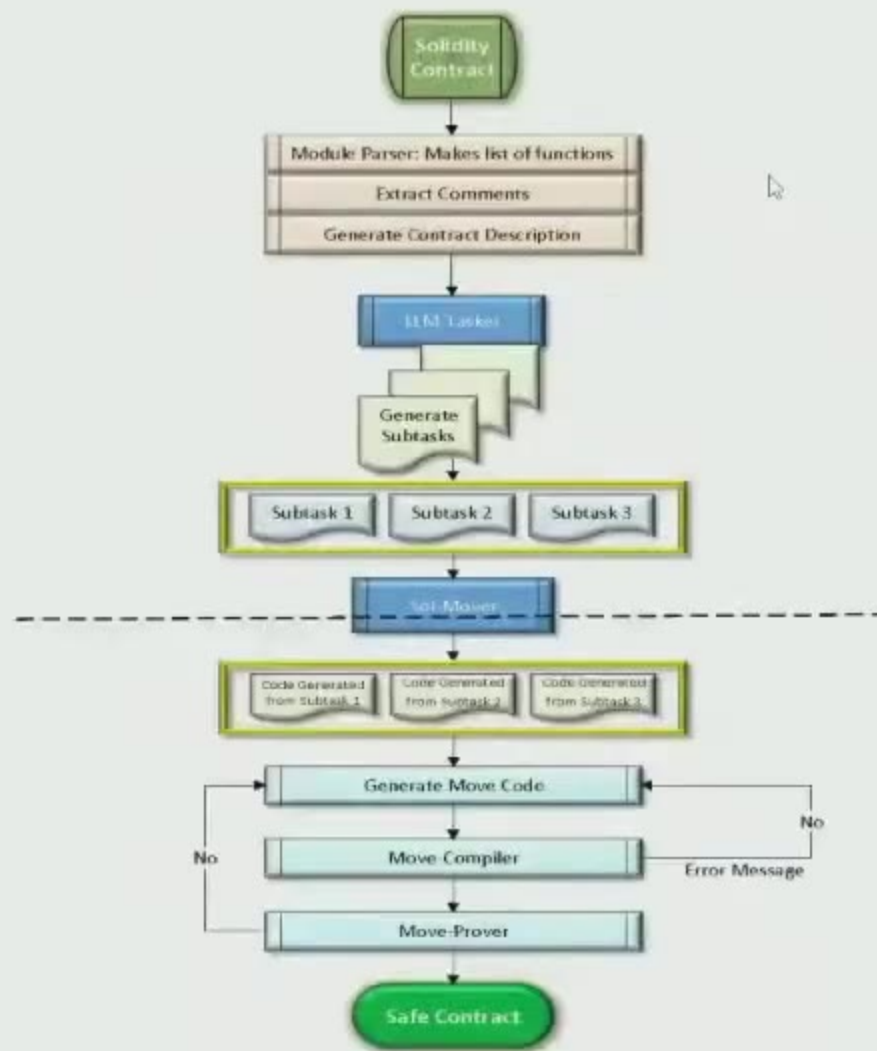


# SolMover: Smart Contract Code Translation Based on Concepts

Rabimba Karanjai\*, Lei Xu†, Weidong Shi\*



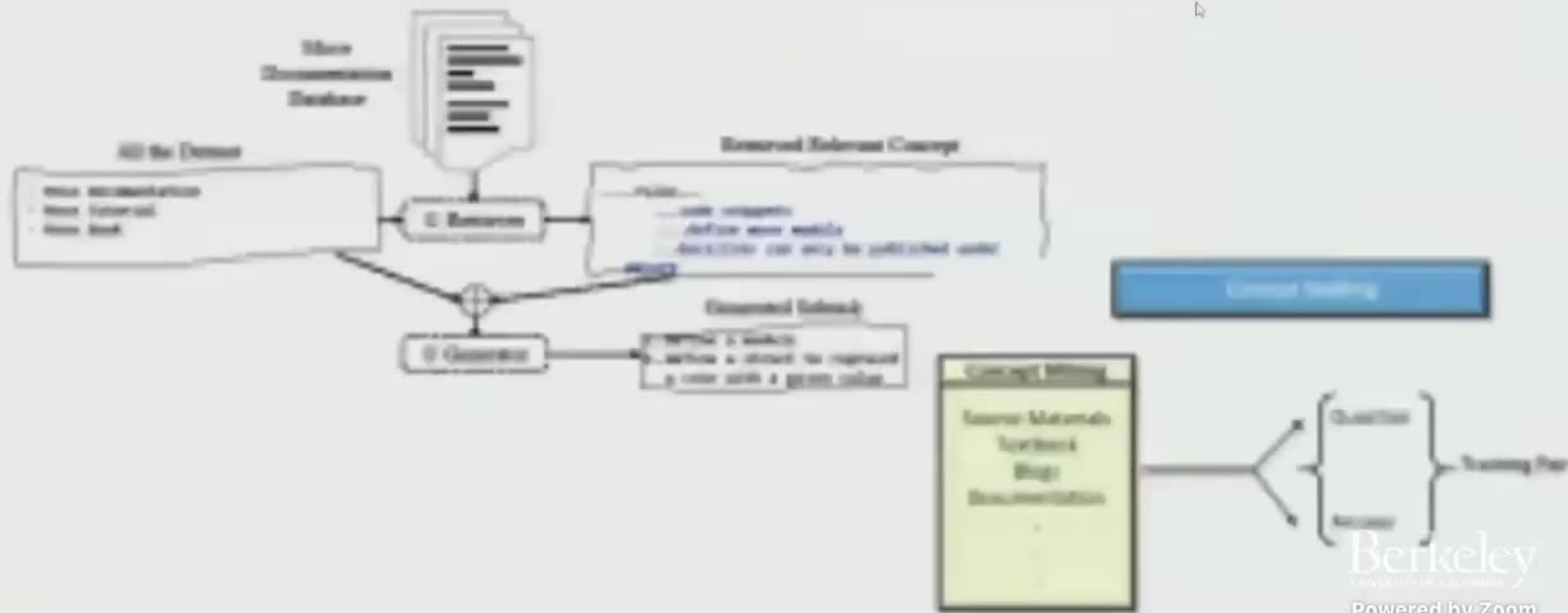
# SolMover: Overview



Verizon Event ...

# Concept Mining

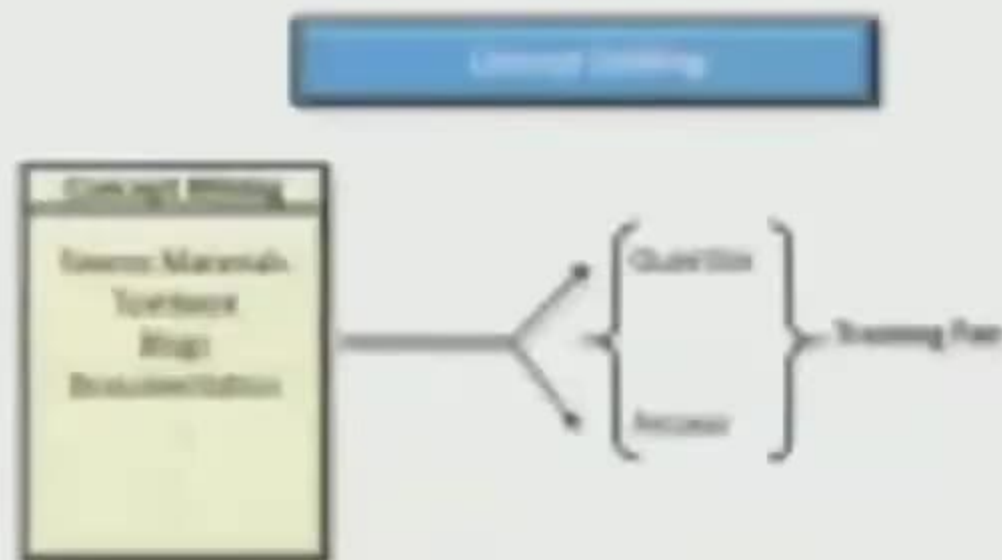
Verizon Event ...



# Concept Mining

Verizon Event ...

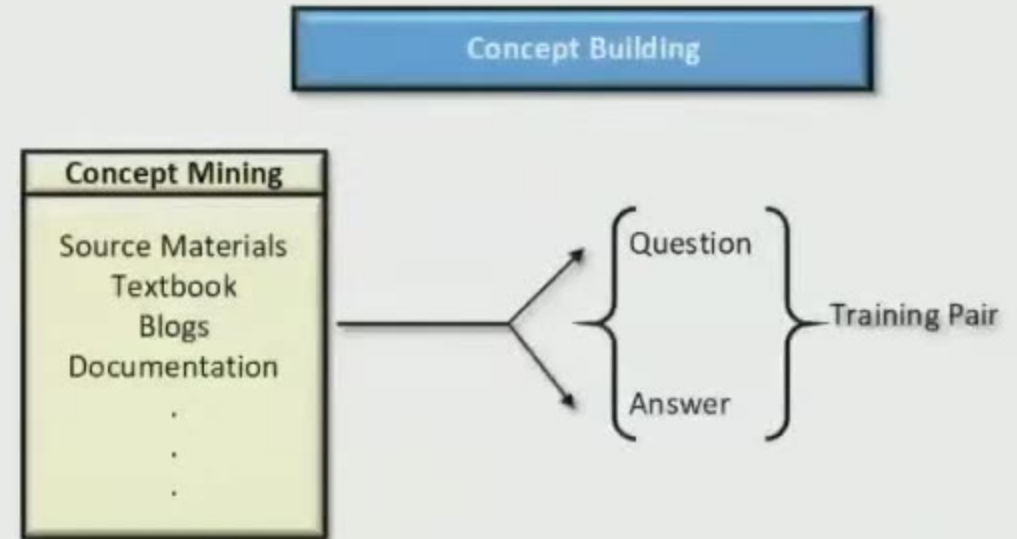
- Query keywords as a set  $X = \{x_1, x_2, \dots, x_k\}$
- A retrieval function, denoted as  $R : (X, C) \rightarrow C$  operates on the query ( $X$ ) and the retrieval database ( $C$ )
- A generative model,  $G$  takes the retrieved fragment  $cx$  and the query context ( $X$ ) as input
- $G$  predicts the subsequent token(s), denoted as  $Y = \{x_{k+1}, \dots, x_{k+n}\}$
- $P(Y) = \prod_{i=1}^n P(x_{k+i} | C, X_{1..k+i-1})$



# Concept Mining

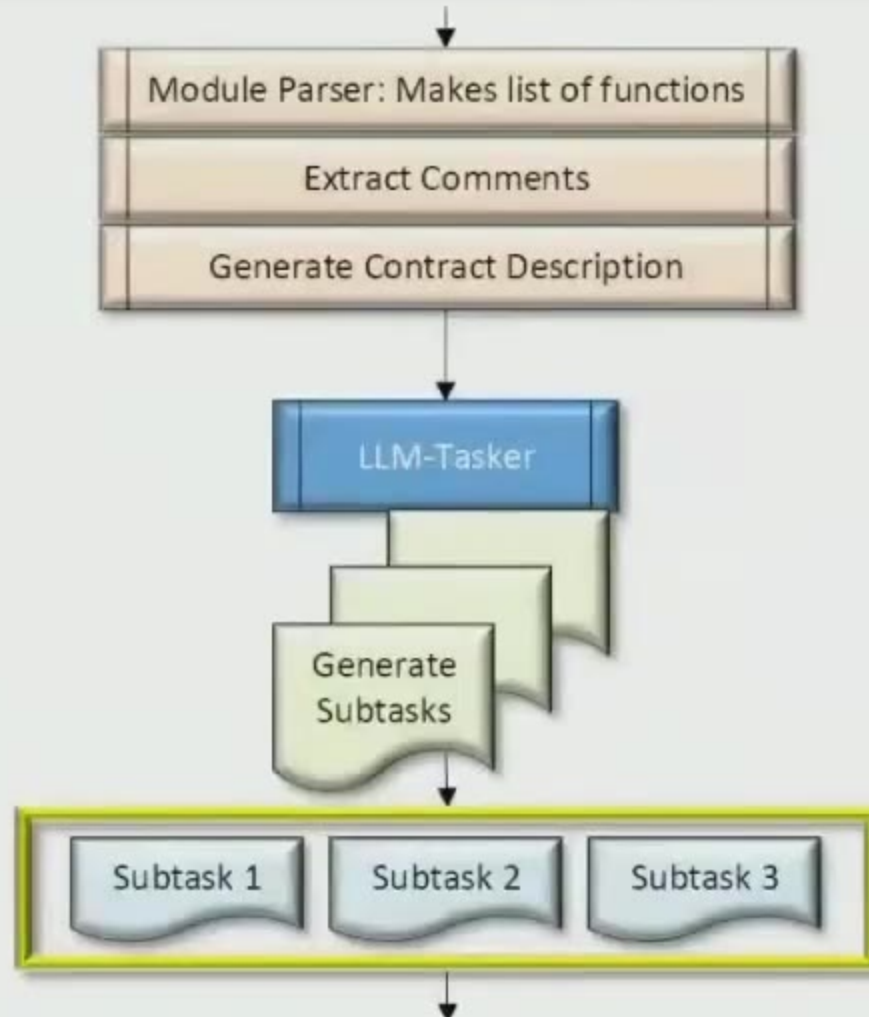


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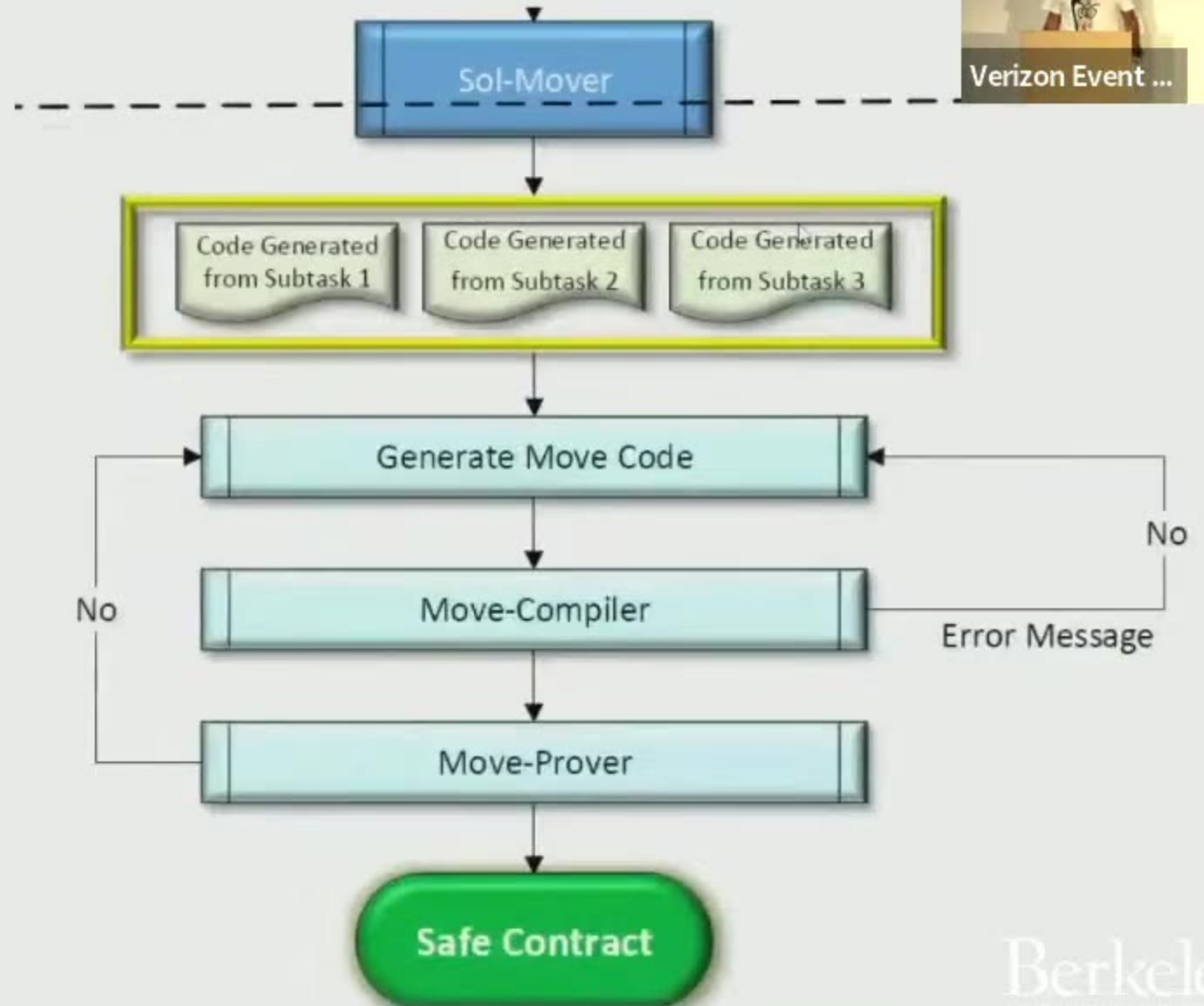
# Sub Task Generation

Verizon Event ...





# Code Generation

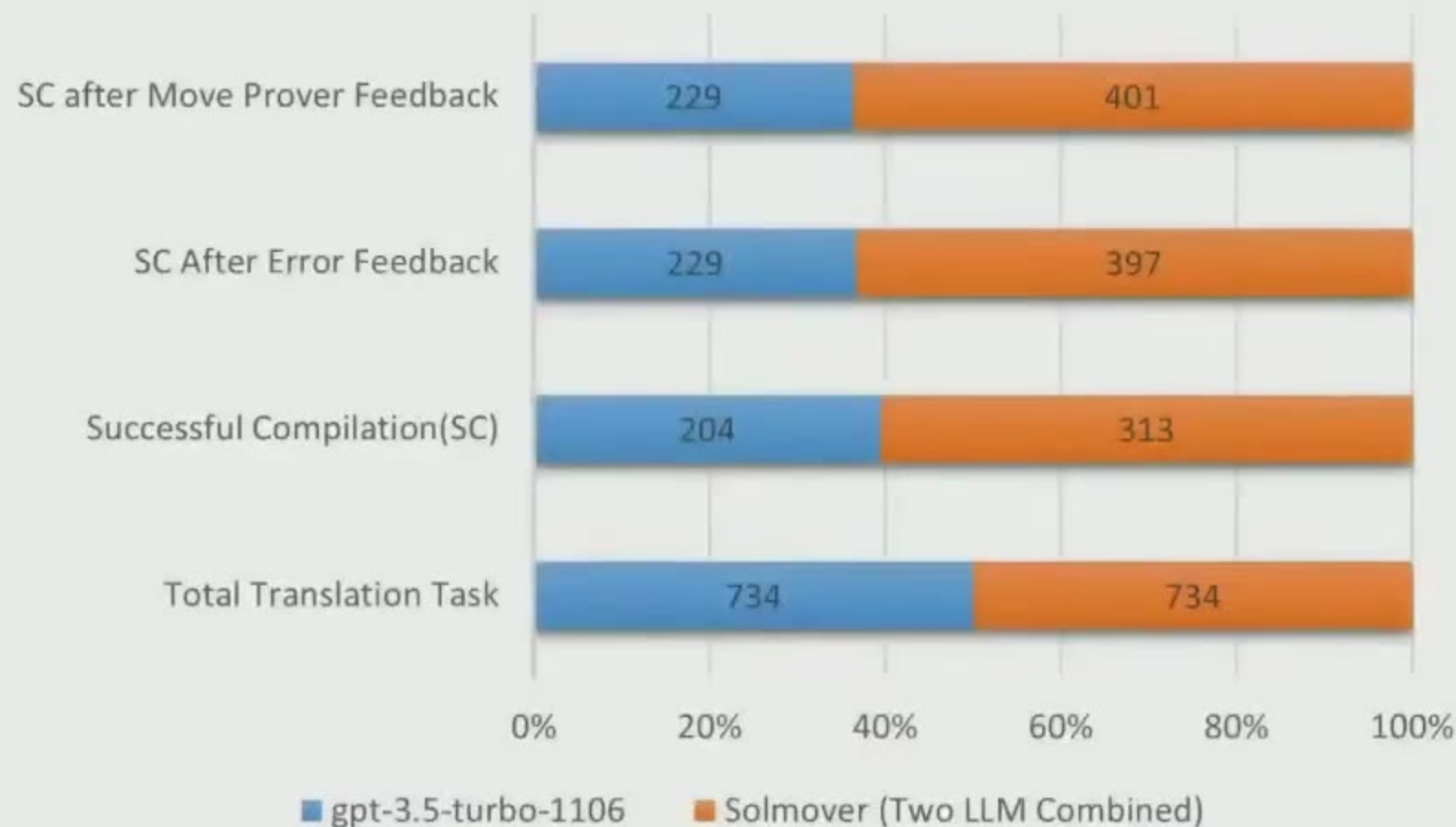




# Evaluation

Successful Tr

Verizon Event ...

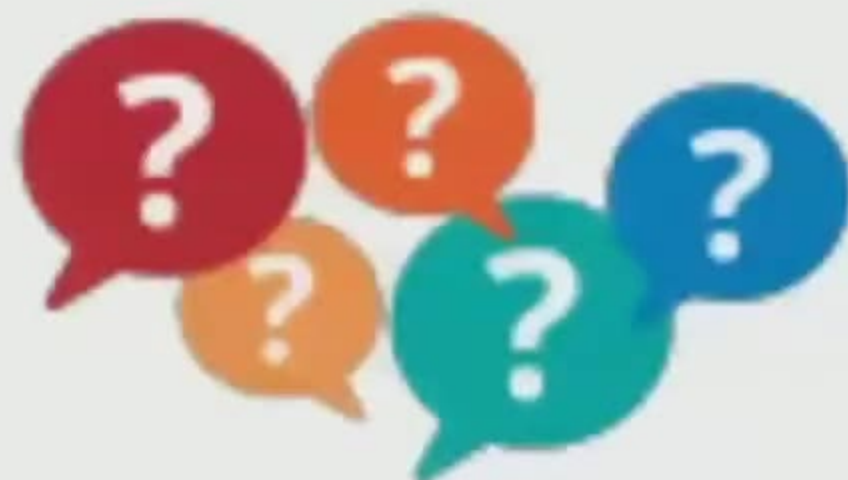




# Questions



Additional Examples:  
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# Questions



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# Questions

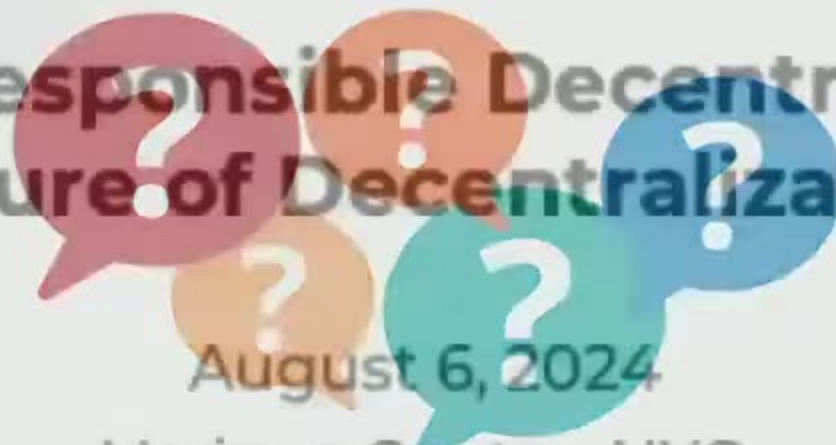
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Berkeley

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