Comparing Natural Language Embeddings for Libc Functions as Rich Labels

Bachelor defense

Ruben Triwari

Ludwig Maximilian University Munich

19, February 2025

Outline

Motivation & Research Objective

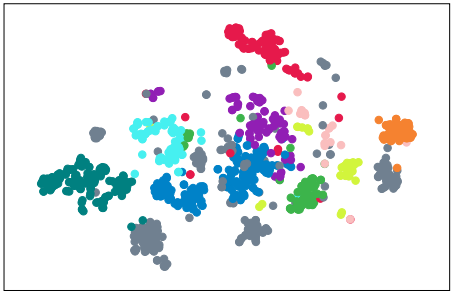
State Of The Art

Methodology

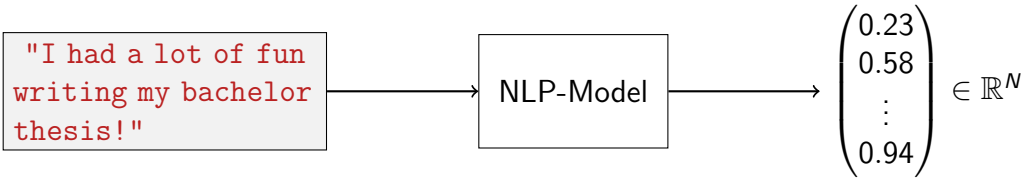
Results

Limitations

Conclusion & Future Work



Motivation



- $\rightsquigarrow$ Encoding natural language was a huge factor in recent nlp advancements
- $\rightsquigarrow$ Information described as a vector can be used in many downstream task
- $\rightsquigarrow$ That motivates encoding binary code and describing them as a vector

Motivation

Motivation

Research Objective

Simply Typed Lambda Calculus – Motivation

Curry-Howard Correspondance

Denotational Semantics

HALLO

HALLO

Discussion