

# Generalized LL parsing for context-free constrained path search problem

Semyon Grigorev  
rsdpisuy@gmail.com

Saint-Petersburg State University, Russia

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In [?] some problems on formal languages path problems are formulated. We want to propose an idea of context-free languages constrained path problem solution. It is based on generalized LL (GLL) [?] parsing algorithm which allow to process arbitrary context-free grammars.

We can specify path constraint as context-free grammar.

s: A s B | eps

All-path semantic.

Extensions allow to check whether path from  $u$  to  $v$  exists and extract it.

Full index — for dynamic graphs. It is necessary only recalculate ... This operation is native for basic algorithm.

## Список литературы

- [1] Miller, J. A., Ramaswamy, L., Kochut, K. J., & Fard, A. (2015, June). Research Directions for Big Data Graph Analytics. In 2015 IEEE International Congress on Big Data (pp. 785–794). IEEE.
- [2] Scott, E., & Johnstone, A. (2010). GLL parsing. Electronic Notes in Theoretical Computer Science, 253(7), 177–189.